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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 49, part 4 (published on 17 December 1992). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Diplodactylus marmoratus* Gray, 1845 (currently *Christinus* or *Phyllodactylus marmoratus*; Reptilia, Squamata): proposed conservation of the specific name. (Case 2863). A.M. Bauer & K. Henle.

(2) *Termes lacteus* Froggatt, 1898 (currently *Coptotermes lacteus*; Insecta, Isoptera): proposed conservation of the specific name. (Case 2864). J.A.L. Watson & H.M. Abbey.

(3) BRACHYPTERINAE Erichson, 1845 (Insecta, Coleoptera) and BRACHYPTERINAE Zwick, 1973 (Insecta, Plecoptera): proposed removal of homonymy. (Case 2865). P.A. Audisio, R. Fochetti & P. Zwick.

(4) MEGALODONTIDAE Zittel, 1881 (Mollusca, Bivalvia) and MEGALODONTIDAE Konow, 1897 (Insecta, Hymenoptera): proposed removal of homonymy. (Case 2866). N.D. Springate.

(5) *Criconemoides* Taylor, 1936 (Nematoda): proposed conservation of usage by the designation of a neotype for *Criconema morgense* Hofmänner & Menzel, 1914. (Case 2867). A.R. Maggenti.

(6) *Hydromantes* Gistl, 1848 (Amphibia, Caudata): proposed designation of *Salamandra genei* Temminck & Schlegel, 1838 as the type species. (Case 2868). H.M. Smith & D.B. Wake.

(7) HEMIDACTYLIIDAE Hallowell, 1856 (Amphibia, Caudata): proposed conservation. (Case 2869). H.M. Smith & D.B. Wake.

(8) *Xerophila geyeri* Soós, 1926 (currently *Trochoidea geyeri*; Mollusca, Gastropoda): proposed conservation of the specific name. (Case 2870). E. Gittenberger.

(9) *Helix nitidula* Draparnaud, 1805 and *H. nitens* Michaud, 1831 (currently *Aegopinella nitidula* and *A. nitens*; Mollusca, Gastropoda): proposed conservation of the specific names and designation of a neotype for *Helix nitidula*. (Case 2871). E. Gittenberger.

(10) QUEDIINI Kraatz, 1857 and XANTHOLININI Erichson, 1839 (Insecta, Coleoptera): proposed precedence over unused senior synonyms; and *Quedius* Stephens, 1829: proposed designation of *Staphylinus levicollis* Brullé, 1832 as the type species. (Case 2872). A.F. Newton, Jr.

(11) *Emys* Duméril, 1806 (Reptilia, Testudines): proposed conservation. (Case 2873). R.G. Webb.

(d) *Ruling of the Commission.* Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The International Commission on Zoological Nomenclature and its publications

The International Commission on Zoological Nomenclature was established in 1895 by the Third International Congress of Zoology, and at present consists of 29 zoologists from 19 countries whose interests cover most of the principal divisions (including palaeontology) of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS), and members are elected by zoologists attending General Assemblies of IUBS or Congresses of its associated bodies. Casual vacancies may be filled between Congresses. Nominations for membership may be sent to the Commission Secretariat at any time.

The International Code of Zoological Nomenclature has one fundamental aim, which is to provide 'the maximum universality and continuity in the scientific names of animals compatible with the freedom of scientists to classify all animals according to taxonomic judgements'. The latest (Third) Edition was published in 1985 by the International Trust for Zoological Nomenclature, acting on behalf of the Commission. A Fourth Edition is in the course of preparation and all zoologists will have a full opportunity to advise the Commission on its contents.

Observance of the rules in the *Code* enables a biologist to arrive at the valid name for any animal taxon between and including the ranks of subspecies and superfamily. Its provisions can be waived or modified in their application to a particular case when strict adherence would cause confusion; however, this must never be done by an individual but only by the Commission, acting on behalf of all zoologists. The Commission takes such action in response to proposals submitted to it; applications should follow the instructions to authors published in each part of the *Bulletin*, and assistance will be given by the Secretariat.

The Bulletin of Zoological Nomenclature is published four times each year. It contains applications for Commission action, as described above; their publication is an invitation for any person to contribute comments or counter-suggestions, which may also be published. The Commission makes a ruling (called an Opinion) on a case only after a suitable period for comments. All Opinions are published in the *Bulletin*, which also contains articles and notes relevant to zoological nomenclature; such contributions may be sent to the Secretariat.

The Commission's rulings are summarised in *The Official Lists and Indexes of Names and Works in Zoology*; a single volume covering the period 1895–1985 was published in 1987, and a free supplement covering 1986–1990 was issued in 1991. Copies may be obtained from the Secretariat.

In addition to dealing with applications and other formal matters, the Commission's Secretariat is willing to help with advice on any question which may have nomenclatural (as distinct from purely taxonomic) implications.

The International Trust for Zoological Nomenclature is a charity (non-profit company) registered in the U.K. The Secretariat of the Commission is at present based in London, and the Trust is established there for legal reasons to handle the financial affairs of the Commission. The sale of publications (*Code*, *Bulletin* and *Official Lists and Indexes*) covers less than half of the costs of the service given to zoology by the Commission. Support is given by academies, research councils, associations and societies from a number of countries, and also by individuals, but despite this assistance the level of income remains a severe restraint and donations to the Trust are gratefully received.

For a more detailed discussion of the Commission and its activities see BZN **48**: 295–299 (December 1991).

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The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature has been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

The Association's President is Dr V. Mahnert (Switzerland), the Vice-President Dr I.M. Kerzhner (Russia), the Secretary Dr E. Macpherson (Spain) and the Treasurer Dr M.A. Alonso-Zarazaga (Spain). Other members of the Inaugural Council are Dr H.M. André (Belgium), Dr J.-P. Hugot (France), Prof. A. Minelli (Italy) and Dr C. Nielsen (Denmark). Membership of the Association is open to all European zoologists; further details can be obtained from Dr M.A. Alonso-Zarazaga, Museo Nacional de Ciencias Naturales, José Gutiérrez Abascal 2, 28006 Madrid, Spain.

The International Code of Zoological Nomenclature

The Third Edition (published 1985) supersedes all earlier versions and incorporates many changes.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £19 or $35, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £15 or $29; payment should accompany orders.

Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895; there are about 9,900 entries.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington, D.C. 20560, U.S.A. The cost is £60 or $110, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £40 or $75; payment should accompany orders.

In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updatings to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

Bulletin of Zoological Nomenclature — Back Copies

Back copies of all the volumes of the *Bulletin*, and of most volumes of the *Opinions and Declarations* that were published concurrently with vols. 1–16 of the *Bulletin*, are still available. Prices on application to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

Bulletin of Zoological Nomenclature — Crustacea and Mollusca Offprints

The International Trust for Zoological Nomenclature is offering a subscription for individual zoologists wishing to receive offprints of all cases in particular disciplines. For an annual payment of £15 or $25 subscribers will receive copies of all Applications, Comments and Opinions relating to either the Crustacea or Mollusca as soon as they are published in the *Bulletin of Zoological Nomenclature*. Offprints are available back to 1980.

Orders for offprints relating to either the Crustacea or the Mollusca should be sent to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K., with payment at the rate of £15 or $25 for each year requested.

A proposed system for stabilizing the names of species, illustrated with reference to the ICHNEUMONIDAE (Hymenoptera)

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Abstract. Based on information (original combinations, changes in generic combinations, homonymies, synonymies, changes in subspecific status and emendations) extracted from 3 836 references, the family ICHNEUMONIDAE had 31 709 described species and subspecies, of which 23 762 were considered valid taxa. In total, 61 001 names (binomina or trinomina) were correct under the terms of the *International Code of Zoological Nomenclature*. Of the 37 239 extra names, 26 702 were caused by differing generic combinations. As this is the major source of 'instability' in nomenclature, a proposal is put forward to amend the Code by preserving the original binomen (generic and specific (or subspecific) names) as the 'nomenclatural part' of the full scientific name, irrespective of taxonomic assignment. The taxonomic placement is indicated by placing the current generic name (and, when relevant, subgeneric and specific names) in front of the original binomen. Thus taxonomic changes will not impinge on the integrity of the nomenclatural binomen and the latter, which acts as a permanent and unambiguous identification label for the taxon, can be the key for storing and retrieving taxonomic and biological information either manually or by computer.

Introduction

The binominal system of taxonomic nomenclature was first proposed by Carl Linnaeus in 1745 and vol. 1 of the tenth edition of his *Systema Naturae* (1758) has been adopted as the origin of the current system of zoological nomenclature (see Usinger, 1964). The rules that govern the formation and application of zoological names are formalized in the *International Code of Zoological Nomenclature*, of which the current (third) edition was published in 1985.

The Code regulates the formation of specific names and the effects of changes in generic combination, homonymy, synonymy, emendation and changes in subspecific status. The literature pertaining to the family ICHNEUMONIDAE was studied to determine the effect of the current Code on the number of species-group names in this family. As a result, a proposal is put forward to amend the Code to make nomenclature more stable and more applicable to computer-oriented technology without diminishing the very important taxonomic function of the system.

The ICHNEUMONIDAE were used for this discussion because they are a large family, estimated to include more than 60 000 species (Townes, 1969), and a relatively homogeneous group, consisting of parasitic wasps that lay eggs in or on other insects. The larva develops at the expense of its host and kills the host in the process. This family includes many species of wasps that are important in the biological control of agricultural and forestry pests.

The Data Set

Some 3836 publications related to ICHNEUMONIDAE published between 1900 and 1990 were compiled from *Zoological Record* (The Zoological Society of London, 1900 1990), *Review of Applied Entomology, Series A: Agricultural* (CAB International Information Services, 1913 1990), and *Entomological Abstracts* (Cambridge Scientific Abstracts, 1969 1990). Some post-1990 references were also included. The taxonomic information from these publications and pre-1900 information taken from Dalla Torre (1901) were entered into a computerized data set managed by a program ('TAXA') written by myself.

The Problem

The family ICHNEUMONIDAE, with 31 709 described species-group taxa, of which 23 762 were considered biologically valid, had 61 001 names (binomina or trinomina) (Table 1). The major source of extra names was differing generic assignments, followed by synonymy and changes in subspecific combinations or status (Table 1). Replacements because of homonymy created less than 1% of the extra names. Emendations may be underestimated because they were seldom explicity stated.

Over half of the supposedly valid taxa had more than one binomen or trinomen (Table 2). Many cases of multiple names were at least partly the result of lumping together nominal taxa, i.e. of subjective synonymy. For example *Atractodes croceicornis* Haliday, 1838 had 75 names of which 36 were junior synonyms (Jussila, 1979, p. 37).

A nomenclature system that has created 37 239 extra names (i.e. labels for the taxa) obviously needs improving. Name changes are a serious loss to the information retrieval capabilities of the present system (Raven, Berlin & Breedlove, 1971). Since scientific names are the key to storing and retrieving knowledge pertaining to the biological world, a stable nomenclature is a necessity for the advancement of our biological knowledge. The wide use of computers in information retrieval systems necessitates a nomenclature system that does not change names, even by a single letter. The present system does not fulfil this function.

In the ICHNEUMONIDAE, as in avian nomenclature (Olson, 1987) and elsewhere, the majority of the changes in names are caused by changes in generic combination. In the present system this is unavoidable. Generic changes are a result of advances in (or different interpretations of) our understanding of the relationship between living things, and as long as our taxonomic knowledge advances generic changes will follow: as pointed out by Brown (1992) 'instability of this sort is desirable'. However, the changes in *names* are certainly not desirable.

Unfortunately changes permeate down to the specific name due to the traditional (and Code regulated) need to conform with Latin grammar. For example, *Togea formosana* Uchida became *Benyllus formosanus* (Uchida) as the former generic name is feminine while the latter is masculine. In a manual literature search this minor change in ending may be unimportant, as the searcher can take such variations into account, but in a computer search *formosana* and *formosanus* will be assumed to refer to two different taxa.

The Proposal

To overcome these deficiencies it is proposed that the original binomen (generic and specific names for species, and generic and subspecific names for taxa originally treated as subspecies) be preserved in the scientific name, of which they would form the 'nomenclatural part'. The taxonomic placement of the taxon would be indicated by placing the current generic name (if different) in front of the original binomen. To this end the following rules are proposed (with deviations from the present Code in italics):

(1) The nomenclatural part of the scientific name for a species-group taxon will consist of two words: the generic name and the specific (or subspecific) name given to the species (or subspecies) by the first describer. *This original binomen will be treated as an inseparable, unchangeable unit irrespective of taxonomic placement.*
   (a) *Because the generic half of the nomenclatural binomen will not be changed, the need to change the ending of the original specific (or subspecific) name will not arise.*
   (b) The first describer's name and the date of publication should follow the binomen. *It will not be necessary to use parentheses to enclose the describer's name and date in order to denote a change in generic combination.*

(2) The taxonomic part of a scientific name will be constituted by the current generic name (and, where applicable, subgeneric and specific names); it forms the classificatory hierarchy of the system. The rules for the treatment of the taxonomic names will be the same as for names in the present Code.

(3) *The full scientific name of a species-group taxon will be formed by placing the taxonomic part in front of the nomenclatural binomen.*

(4) When the original binomen and the current name are the same, this constitutes the full name (so the generic name is not repeated).

(5) *The full (taxonomic plus nomenclatural) name should be cited at least once in all papers*, together with the original author and date; for repeated reference to a species-group taxon the original generic name may be omitted (as in the present system) if it is different from the current generic assignment.

To demonstrate the proposed system, three scientific names of *Togea formosana*, first described by T. Uchida in 1926 and which has since been subject to two generic changes and one change in subspecific status, are illustrated in Table 3.

In the present system, determining if *Benyllus formosanus* (Uchida, 1926) and *Stirexephanes signatus formosanus* (Uchida, 1926) are actually the same taxon is not easy, because Uchida described 13 species under the same specific name, two of them in 1926. The name *formosanus* (*-a*, *-um*) is used 34 times in the ICHNEUMONIDAE (the problem is magnified further in the case of *meridionator*, which was used by J.-F. Aubert between 1959 and 1982 for 62 different 'subspecies' from southern France!). In the proposed system *Benyllus Togea formosana* and *Stirexephanes signatus Togea formosana* are obviously the same taxon, since the binomen *Togea formosana* is unique. Even errors in (or omission of) the author and date will cause little difficulty.

The proposed system will maintain a stable nomenclature in the midst of a desirably 'unstable' taxonomy, and cater to both needs (taxonomy and information

retrieval) at the same time. Only primary homonymy will affect the nomenclatural part of the name. Had this system been in place since the time of Linnaeus there would be 29 514 fewer names now (items 2, 4 and 6 in Table 1). These constitute 79% of the extra names created up to 1990 for the family ICHNEUMONIDAE; the rest are nearly all subjective synonyms due to supposedly new descriptions of (possibly) the same taxon.

The difficulty in devising a computer search strategy for a taxon with names like *Togea formosana* and *Stirexephanes signatus formosanus* is obvious. However, if we preserve the binomen *Togea formosana* in the formal name of the taxon the search will be easier. Thus the binomen, acting as a permanent identification label for the taxon, can be used as an anchor for taxonomic and biological information and the key for storing and retrieving this either manually or by computer.

At the meeting of the International Commission on Zoological Nomenclature in 1990 at the University of Maryland changes were suggested to the Code 'to provide a stable and universal nomenclature for the 21st century' (Savage, 1990). Major proposals were explicit restrictions on the reintroduction of unused senior synonyms and the eventual establishment of 'Lists of names in current use'. These suggestions would solve some problems related to name changes arising from the principle of priority, but would not solve problems arising from changes in generic combinations. As instability due to the priority of names is miniscule compared to 'instability' due to generic changes the effort to create Lists of species will solve few of the present nomenclatural difficulties. Furthermore, there may not be enough taxonomists willing to take up the task of creating the Lists. The magnitude of this task can be gauged from the fact that there are 31 709 described species and subspecies in the ichneumonid family alone, and this is only one of some 72 families in the order Hymenoptera, and Hymenoptera is only one of the 23 orders in the class Insecta (Borror, DeLong & Triplehorn, 1976). A more practical alternative to such Lists is to encourage the production of frequently updated computer-based catalogues which use an improved system of nomenclature.

From the point of view of a user (such as a biological control practitioner) the most common concerns when writing species names in publications are (1) is the generic combination that most widely accepted? (2) is the ending of the specific name correct? and (3) should the first describer's name be in parentheses? These may sound trivial to a taxonomist, but they are real problems to non-taxonomists. The present system and the suggestions made at the Maryland meeting will only perpetuate these concerns. The fourth edition of the Code is now in preparation; it is to be hoped that it will prescribe a nomenclature system that will adequately serve both the science of taxonomy and the concerns of the majority of users of scientific names.

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Table 1. *Number of species and subspecies names in the family ICHNEUMONIDAE*

(1)	Number of described valid species and subspecies		23 762
	Extra names due to		
(2)	generic changes	26 702	
(3)	primary homonymy	333	
(4)	secondary homonymy	222	
(5)	synonymy	7364	
(6)	subspecific changes	2590	
(7)	emendations	28	37 239
			61 001

Table 2. *Number of names per valid species or subspecies*

Number of names per valid species or subspecies	Number of valid species and subspecies
1	10 562
2	6605
3	2600
4	1265
5	658
6	541
7	330
8	235
9	189
10	141
11 to 75	636
	23 762

Table 3. *Comparison of the present nomenclature system with the proposed system using the scientific names of an ichneumonid wasp first described by T. Uchida*

	The Present System	The Proposed System
(1)	*Togea formosana* Uchida, 1926	*Togea formosana* Uchida, 1926
(2)	*Benyllus formosanus* (Uchida, 1926)	*Benyllus Togea formosana* Uchida, 1926
(3)	*Stirexephanes signatus formosanus* (Uchida, 1926)	*Stirexephanes signatus Togea formosana* Uchida, 1926

In the proposed system the unchanging binomen *Togea formosana* constitutes the nomenclatural part of the full scientific name. This system, unlike the present one, unambiguously distinguishes the taxon from *Ctenichneumon formosanus* Uchida, 1926 (= *Setana formosana* (Uchida, 1926)).

Sources: (1) Uchida, 1926, p. 112. (2) Uchida, 1935, p. 18. (3) Townes, Townes & Gupta, 1961, p. 348.

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Case 2847

Ascopora Trautschold, 1876 (Bryozoa, Cryptostomata): proposed designation of *Ceriopora nodosa* Fischer von Waldheim, 1837 as the type species

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Abstract. The purpose of this application is the designation of *Ceriopora nodosa* Fischer von Waldheim, 1837 as the type species of the Carboniferous bryozoan genus *Ascopora* Trautschold, 1876. This is the taxonomic species misidentified by Trautschold as *Millepora rhombifera* Phillips, 1836.

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1. Trautschold (1876, p. 367) established the genus *Ascopora* for small erect dendroid bryozoans characterised by an axial region composed of several elongate tubes, based on material from the Lower Carboniferous of Russia. He assigned his material to the nominal species *Millepora rhombifera* Phillips, 1836 and placed several other species in synonymy with this, including *Ceriopora nodosa* Fischer von Waldheim, 1837, *Millepora gracilis* Phillips, 1841 and *Monticulipora tumida* (Phillips, 1836). Trautschold (1876, p. 368) described his material as having 13 longitudinal rows of 'pores' (autozooecial apertures) and lacking any surface ornament except for the presence of four small pits which surrounded autozooecial apertures. He stated that he had not examined the types of *Millepora rhombifera* and could not be certain if his material was conspecific with Phillips's species but thought this likely.

2. In 1836 John Phillips had described and illustrated a number of bryozoans including (p. 199, pl. 1, figs. 34–35) a new species *Millepora rhombifera* from the Lower Carboniferous of Bolland, Yorkshire, England. He described this species as having 'branches cylindrical, with acute rhomboidal cells in quincunx'. *Millepora rhombifera* was subsequently attributed to the genus *Ceriopora* by several authors (d'Orbigny, 1850; Morris, 1854; Jukes, 1857; Baily, 1875). John Young (1874, p. 401) reported that he and Prof J. Young had recognised a central axial cylinder in specimens of *Ceriopora rhombifera*. These were described and figured by Young & Young (1874, p. 337) who established a new genus *Rhabdomeson* for this and other species of small erect cylindrical bryozoans with central hollow axes from which autozooecia were budded.

3. Although Phillips's type specimens of *Millepora rhombifera* are no longer extant, specimens of his taxon have been collected by many workers from similar horizons in the British Isles and elsewhere. *Rhabdomeson rhombiferum* (Phillips, 1836) consists of very delicate dendroid zoaria composed of cylindrical branches. Autozooecia are budded in an annular pattern from an ill-defined central axial cylinder. Autozooecial apertures are pyriform to ellipsoidal in shape and arranged in eight to 11 longitudinal rows around branches. Autozooecial apertures vary greatly in size and spacing around branches. Small heterostyles of varying diameter are developed in a single row surrounding apertures and in proximal interapertural areas. *Rhabdomeson rhombiferum* occurs

in strata of Lower to Upper Carboniferous age and has a wide geographical distribution in the British Isles (Phillips, 1836; M'Coy, 1844; Griffith, 1862; Young & Young, 1875; Vine, 1881, 1885, 1889; Bassler, 1929) and in Belgium (Demanet, 1938). Although '*R. rhombiferum* Phillips' has been recorded from the former Soviet Union (e.g. by Morozova, 1955; Shulga-Nesterenko, 1955) this material is not conspecific with the British form.

4. Trautschold (1876) incorrectly identified his material as conspecific with *M. rhombifera* Phillips, 1836, which on close examination bears little resemblance to his own. *Ascopora* is characterised by an axial bundle of as many as 30 axial zooecia, whereas *Rhabdomeson* has an axis consisting of a single axial cylinder. Fritz (1963, p. 54) remarked that Trautschold's 'selection of the genotype for *Ascopora* would seem to have been not in the best order'. Trautschold's material belongs to *Ceriopora nodosa* Fischer von Waldheim, 1837 (p. 166), an erect delicate cryptostome with a central axial bundle of as many as 20 axial zooecia (Gorjunova, 1975, 1985). This view is held by researchers in the former Soviet Union, many of whom cite *Ascopora nodosa* (Fischer von Waldheim, 1837) as the type species of the genus *Ascopora* (e.g. Nikiforova, 1938; Shulga-Nesterenko, 1955; Gorjunova, 1985). However, in strict accordance with the Code, the nominal species *Millepora rhombifera* Phillips is still formally cited as the type species of *Ascopora* by western researchers (e.g. McKinney, 1972; Blake, 1983; Karklins, 1986) and in a few Russian publications, even though they all use the genus in the taxonomic sense of *C. nodosa*. To retain *Millepora rhombifera* as the type species would contravene current usage and cause confusion and I propose that *Ceriopora nodosa* be designated as the type species.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Ascopora* Trautschold, 1876 and to designate *Ceriopora nodosa* Fischer von Waldheim, 1837 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Ascopora* Trautschold, 1876 (gender: feminine), type species by designation in (1) above *Ceriopora nodosa* Fischer von Waldheim, 1837;

(3) to place on the Official List of Specific Names in Zoology the name *nodosa* Fischer von Waldheim, 1837, as published in the binomen *Ceriopora nodosa* (specific name of the type species of *Ascopora* Trautschold, 1876).

Acknowledgements

I thank Dr Dan Blake (Urbana) for locating some papers relevant to this application, and Dr Ulli Coleman (Trinity College, Dublin) for translating parts of Trautschold (1876).

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Case 2838

Pleurobranchus forskalii Rüppell & Leuckart, [1828] and *P. testudinarius* Cantraine, 1835 (Mollusca, Gastropoda): proposed conservation of the specific names

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Abstract. The purpose of this application is to conserve the specific names of the pleurobranch opisthobranch molluscs *Pleurobranchus forskalii* Rüppell & Leuckart, [1828] and *P. testudinarius* Cantraine, 1835. The latter name is threatened by the senior objective synonym *Pleurobranchus forskahli* Delle Chiaje, 1822. Additionally, it is shown that the name 'Lepus marinus' mentioned by Forsskål (1776) and others is a vernacular.

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1. Forsskål's Atlas of Plates of 'oriental nature' observed on an expedition to Arabia was published posthumously in 1776. The illustrations were identified by a list of binominal latinised names, most with no accompanying description or reference to a description. The few references to descriptive material or previously published names were printed in italicised type. Plate 28A is an easily recognised figure of a common Indo-West Pacific pleurobranch opisthobranch mollusc at present known as *Pleurobranchus forskalii* Rüppell & Leuckart, [1828]. Forsskål's entry to this figure reads: 'A. *Lepus marinus*. Arab. Arneb bachri. Avicenna. Libr. II. pag. 63'. In Forsskål's text new names are in roman typeface, while names given by earlier authors are italicised. On page 9, three names are italicised. Two of these, *Ascidia gelatinosum* and *Ascidia quadridentata*, are referred to Linnaeus, while the third, *Lepus marinus*, is referred to Avicenna, the Arab physician (980 1037 AD) who republished and commented on the writings of the early Greeks and Romans. The phrase 'Arneb bachri' mentioned by Forsskål in the entry for '*Lepus marinus*' can be loosely translated from Arabic as 'wild rabbit'. The name 'Lepus marinus' has been used at least since Roman times (see Cuvier, 1803; Rang, 1828; Eales, 1921, 1960) and was applied generally to sea hares and large sea slugs, usually *Aplysia*. Linnaeus (1758, p. 653), in the 10th edition of *Systema Naturae*, listed four earlier uses of 'Lepus marinus' under his genus *Tethys*, some of which apply to an aplysiid and others to the nudibranch *Tethys*. Linnaeus (p. 57) introduced the mammalian name *Lepus*, evidently distinguishing between the formal mammalian genus *Lepus* and the informal vernacular use of the descriptive name for sea hares and similar gastropods.

2. Forsskål's (1776) illustration was referred to by both Cuvier (1817, p. 396) and Lamarck (1819, p. 339) as probably a specimen of *Pleurobranchus peronii* Cuvier, 1804; this is in fact a different species. Lamarck's reference (1819, p. 339) to the illustration as 'An Lepus marinus?' suggests that he did not consider Forsskål's name to be more than a descriptive vernacular name. Rüppell & Leuckart ([1828], pp. 18 -20, pl. 5, figs. 2a, b)

gave the name *Pleurobranchus forskålii* to the species illustrated by Forsskål, and referred to his use of the name 'Lepus marinus'.

3. Article 11b of the Code requires that to be available a name 'must be... used as a scientific name by the author when published'. It is clear that Forsskål did not use '*Lepus marinus*' as a scientific name and that none of the authors listed above (Cuvier, Lamarck, Leuckart, Linnaeus and Rüppell) accepted it as such, although it consists of two Latin words. However, Sherborn (1902) listed *Lepus marinus* Forsskål without comment as an apparently available name, as did Pilsbry (1896) in his use of the binomen *Oscanius marinus* Forsskål as valid for *forskalii* Rüppell & Leuckart.

4. The earliest available name for Forsskål's Indo-West Pacific species has generally been thought to be *Pleurobranchus forskålii* Rüppell & Leuckart, [1828]. However, Delle Chiaje used the name *Pleurobranchus forskahli* for a different species endemic to the Mediterranean. With one exception, all workers have considered the date of publication of both names to be 1828 (see Winckworth, 1942, for dates of publication of Rüppell & Leuckart) and have treated *P. forskahli* Delle Chiaje (November 1828, p. 154) as a junior homonym of *Pleurobranchus forskalii* Rüppell & Leuckart. The exception is Issel who (1869, p. 162) proposed the replacement name *P. ruppellii* for Rüppell & Leuckart's species, but this has been ignored. Delle Chiaje's specific name *forskahli* is normally cited as available from November 1828. However, an Atlas of Plates containing the relevant figures was published in 1822. The name *Pleurobranchus forskahli* appears at the bottom of pl. 41, referring to fig. 11, thereby making that specific name available from 1822. In his 1828 publication Delle Chiaje, after a two-line Latin description followed by 'nobis', cited Forsskål's reference as 'An Lepus marinus? FORSKAHL Fn. arab. tab xxviii'. Although Delle Chiaje identified his species with Forsskål's this was incorrect and his illustration and description show that he was introducing a new name for the Mediterranean species. Cantraine (1835) recognized that there were two distinct species. He proposed the replacement name *Pleurobranchus testudinarius* for the Mediterranean species in the belief that the two names were homonyms and on the mistaken assumption that Rüppell & Leuckart's name had priority. Cantraine's description bears the annotation 'V. Leuckart' implying that he was acting on advice from Leuckart. Under Article 32d(1) *forskålii* must be corrected to *forskalii*; this spelling is not identical to *forskahli* and under Article 57f they cannot be treated as homonyms.

5. It follows from this argument that the names *Pleurobranchus forskahli* Delle Chiaje, 1822 (for the Mediterranean species) and *P. forskalii* Rüppell & Leuckart, [1828] (for the Indo-West Pacific species) are both available. The Indo-West Pacific species has been given many names, but the two most consistently and recently used are *Pleurobranchus forskalii* Rüppell & Leuckart and *P. semperi* (Vayssière, 1896) for the dark and light colour forms respectively. The Mediterranean species, after a period of nomenclatural confusion (see Pilsbry, 1896), has consistently had the specific name *testudinarius* Cantraine, 1835 applied to it in combination with the generic name *Pleurobranchus* or two of its synonyms, *Oscanius* Gray, 1847 and *Susania* Gray, 1857 (see Willan, 1987). Authors using the name *testudinarius* in these combinations include Haefelfinger (1960, pp. 334, 347), Schmekel (1968, pp. 113, 149) and Cattaneo-Vietti & Thompson (1989, p. 195); a further 20 papers are held by the Commission Secretariat. To adopt the prior name *Pleurobranchus forskahli* Delle Chiaje, 1822 would cause great confusion, not only because the species is currently known as *P. testudinarius*, but also because the very similar name *P. forskalii* is used for the Indo-West Pacific species,

which has also entered the eastern Mediterranean through the Suez Canal (Barash & Danin, 1977, pp. 97, 103).

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *forskahli* Delle Chiaje, 1822, as published in the binomen *Pleurobranchus forskahli*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place the following names on the Official List of Specific Names in Zoology:
   (a) *forskalii* Rüppell & Leuckart, [1828], as published in the binomen *Pleurobranchus forskålii*;
   (b) *testudinarius* Cantraine, 1835, as published in the binomen *Pleurobranchus testudinarius*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *forskahli* Delle Chiaje, 1822, as published in the binomen *Pleurobranchus forskahli* and as suppressed in (1) above.

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Case 2846

Cryptophagus advena Waltl, 1834 (currently *Ahasverus advena*; Insecta, Coleoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of the foreign grain beetle, *Ahasverus advena* (Waltl, 1834) (family SILVANIDAE), a pest of stored grain and other foodstuffs. The name is threatened by the identification of the only known syntype of *Lyctus brunneus* Fabricius, 1792 as a specimen of *Ahasverus advena*. The Fabricius name is a senior secondary homonym of *Lyctus brunneus* (Stephens, 1830), a cosmopolitan timber pest; since the species are not now thought to be congeneric and the Stephens name has never been replaced it remains valid, but the homonymy strengthens the argument for suppressing *L. brunneus* Fabricius.

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1. *Lyctus brunneus* Fabricius, 1792 (p. 503) was named and described from material sent to its author by Dr Pflug, who collected it in the 'Danish West Indies' (St Thomas, St John and Santa Cruz). According to Horn & Kahle (1936, p. 208), Pflug gave all his 'Dänisch-westindische' material to Fabricius. In Fabricius's collection (the Kiel Collection) in the Universitetets Zoologisk Museum, Copenhagen, a single specimen (no. 3882; see Zimsen, 1964, p. 225) bears the name *Lyctus brunneus* and is the only known syntype. Although it conforms with the original description, I found it to be an example of the species currently known as *Ahasverus advena* (Waltl, 1834, p. 169) (family SILVANIDAE). The name *Lyctus brunneus* Fabricius has not appeared in primary zoological literature since its re-description by Fabricius in 1801 (p. 561), where a repetition of the original diagnosis and locality data was given.

2. *Xylotrogus brunneus* Stephens, 1830 (p. 117) was described from a single specimen taken from a wasp nest at Dulwich, London. The holotype is in the Stephens collection in the Natural History Museum, London. *Xylotrogus* Stephens, 1830 (p. 116), of which *Xylotrogus brunneus* is the type species by monotypy, was synonymised with *Lyctus* Fabricius, 1792 (p. 502) by Wollaston (1854, p. 152); this synonymy is now universally accepted, making *Lyctus brunneus* (Stephens, 1830) a junior secondary homonym of *L. brunneus* Fabricius, 1792. However, since the two species are not now regarded as congeneric (para. 1 above) and since Stephens's name *brunneus* has never been replaced it remains valid (Article 59c of the Code). *Lyctus brunneus* (Stephens) is a cosmopolitan timber pest, one of a small group of LYCTIDAE (powder post beetles), collectively estimated to cause several million pounds worth of damage annually. Over the years it has been the subject of considerable research outside the field of taxonomy. Since 1950 the name has been used in the title and/or text of more than 40 scientific papers, publicly available pamphlets and textbooks in Europe, America, Africa and Australia (e.g. Gay, 1953; Brimblecombe, 1961; Ito &

Hirose, 1979; Winstanley, 1987). A further 25 references, dating from 1951 to 1989, by 24 different authors have been given to the Commission Secretariat.

3. *Cryptophagus advena* Waltl, 1834 (p. 169) was named and described from a beetle found among fungi brought back from South America by a Dr Popping. It was transferred by des Gozis (1881, p. cxxvii) to his new genus *Ahasverus* of which it is the type species by monotypy. Like *Lyctus brunneus* (Stephens), it is now known to be a cosmopolitan species and is a scavenger found among cargoes of grain and other foodstuffs from Africa and Asia and ranks also as a pest of stored products. Woodroffe (1962) evaluated its pest status. Since 1950, the name has been used in more than 40 scientific papers, textbooks and publicly available pamphlets (e.g. Hill, 1965; Loschiavo & Atkinson, 1967; David & Mills, 1975; Thomas & Clasper, 1986). A further 32 references, all published after 1962 and the work of at least 29 different authors, have been given to the Commission Secretariat.

4. The nomenclatural stability of the well-known and cosmopolitan pest species *Ahasverus advena* (Waltl, 1834) is threatened by the identification of the only known syntype of *Lyctus brunneus* Fabricius, 1792 as a specimen of this species. Although *L. brunneus* Fabricius, 1792 does not threaten *L. brunneus* (Stephens, 1830) the existence of the secondary homonymy is a further argument for suppression of the Fabricius name.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *brunneus* Fabricius, 1792, as published in the binomen *Lyctus brunneus*, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Ahasverus* des Gozis, 1881 (gender: masculine), type species by monotypy *Cryptophagus advena* Waltl, 1834;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *advena* Waltl, 1834, as published in the binomen *Cryptophagus advena* (specific name of the type species of *Ahasverus* des Gozis, 1881);
   (b) *brunneus* Stephens, 1830, as published in the binomen *Xylotrogus brunneus* (specific name of the type species of *Xylotrogus* Stephens, 1830);

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *brunneus* Fabricius, 1792, as published in the binomen *Lyctus brunneus* and as suppressed in (1) above.

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Case 2758

Buprestis Linnaeus, 1758 and *Chrysobothris* Eschscholtz, 1829 (Insecta, Coleoptera): proposed conservation by the designation of *Buprestis octoguttata* Linnaeus, 1758 as the type species of *Buprestis*

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Abstract. The purpose of this application is to conserve the universal understanding and usage of the names *Buprestis* Linnaeus, 1758 and *Chrysobothris* Eschscholtz, 1829 (family BUPRESTIDAE Leach, 1815, the jewel beetles) by designating *B. octoguttata* Linnaeus, 1758 as the type species of *Buprestis*. At present *B. chrysostigma* Linnaeus, 1758 is the valid type species of both *Buprestis* and *Chrysobothris*. Both genera, which have worldwide distribution, include species which are serious economic pests.

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1. Linnaeus (1758, p. 408) established the genus *Buprestis* with 19 included species. Among these were *octoguttata*, *mariana* and *chrysostigma*. By 1800 more than 250 species had been described in the genus although no type species had been designated. Many of the species originally included by Linnaeus are now placed in other genera.

2. Geoffroy (1762, p. 123) replaced the name *Buprestis* Linnaeus with his new name *Cucujus* and (p. 137) used *Buprestis* in place of the carabid names *Carabus* and *Cicindela* Linnaeus, 1758. This was recorded by Müller (1764, pp. xvi, xvii). Neither *Cucujus* nor *Buprestis* have been adopted in Geoffroy's sense; in an application to the Commission Kerzhner (BZN **48**: 120) has proposed the conservation of *Cucujus* Fabricius, 1775 (the type genus of the CUCUJIDAE) by the suppression of all previous uses of the name *Cucujus*.

3. Eschscholtz (1829, p. 9) established the genus *Chrysobothris* with three included species: *Buprestis chrysostigma*, *B. impressa* Fabricius, 1775 (p. 220) and *B. affinis* Fabricius, 1794 (p. 450). No type species was designated. Eschscholtz originally spelled the generic name as *Chrysobotris* but this has not been used for over 150 years and an application for the conservation of *Chrysobothris* has been published (BZN **49**: 120–121).

4. A number of type species designations have been made for *Buprestis* Linnaeus and *Chrysobothris* Eschscholtz, extending over several years. Latreille (1810, p. 426) designated *Buprestis chrysostigma* 'Fab.' (i.e. Fabricius, 1775, p. 219, who cited Linnaeus) as the type species of *Buprestis*. Subsequently Westwood ([1838], p. 24), apparently overlooking the earlier designation, designated *B. chrysostigma* as the type species of *Chrysobothris*, thereby rendering the latter name a junior objective

synonym of *Buprestis*. The type species designations in Westwood's *Synopsis of the genera of British insects* were accepted as valid in Opinion 71 (January 1922). The dates of publication of the work were set out in Direction 63 (June 1957). Gozis (1886, p. 20) designated *B. octoguttata* as the type species of *Buprestis*. Chamberlin (1926, p. 24) designated *B. affinis* Fabricius as the type species of *Chrysobothris*. Richter (1952, p. 190) designated *B. mariana* Linnaeus as the type species of *Buprestis* and (p. 199) *B. impressa* Fabricius as the type species of *Chrysobothris*.

5. In 1837 Kirby (p. 156) established *Odontomus* as a subgenus of *Buprestis*; however, he designated *B. chrysostigma* as the type species, thereby rendering *Odontomus* a junior objective synonym of *Buprestis* Linnaeus, 1758 (following Latreille's type designation). *Odontomus* is also a junior objective synonym of *Chrysobothris* Eschscholtz, 1829 (as typified by Westwood the following year). Kirby's classification did not include a nominotypical (in the modern sense) subgenus *Buprestis* (*Buprestis*).

6. Current usage of *Buprestis* and *Chrysobothris* is consistent with *octoguttata* and *chrysostigma* respectively as the type species. However, a strict adherence to the Principle of Priority and the recognition of Latreille's (1810) designation of *chrysostigma* as the type of *Buprestis* would necessitate using *Buprestis* as the valid name for the genus now called *Chrysobothris*, with *Chrysobothris* being a junior objective synonym. Another name would be required for *Buprestis* as currently understood. The next available is that of *Ancylochira* Eschscholtz, 1829 (p. 9), published with *octoguttata* and *Buprestis rustica* Linnaeus, 1758 (p. 409) among the seven included nominal species. Westwood ([1838], p. 24) designated *rustica* as the type of the genus. *Ancylochira* has been considered a junior subjective synonym of *Buprestis* and has been used as a valid name by only a single recent author, Richter (1952), who (p. 26) erroneously cited *octoguttata* as the type species.

7. The question of the status of the names *Buprestis* and *Chrysobothris* has long been recognized. Kerremans (1906, pp. 174–176) noted that there was confusion among earlier authors in the use of *Buprestis*; he accepted *B. octoguttata* as the type species. Méquignon (1939, pp. 48–49; a member of the Commission at that time) pointed out that the usage of the names *Buprestis* and *Chrysobothris* did not accord with Latreille's (1810) type designation; he proposed to refer the problem to the International Congress of Zoology for a suspension of the Code. Fisher (1942, p. 3) noted: 'On account of the wide distribution and great number of species, and an unbroken history of constant universal usage for over 100 years, and since a change of name at this late date would cause greater confusion than uniformity, the International Commission on Zoological Nomenclature will be requested to place *Chrysobothris* Eschscholtz, with *Buprestis chrysostigma* Linnaeus as type, and *Buprestis* Linnaeus, with *B. octoguttata* Linnaeus as type, on the Official List of Generic Names under suspension of the rules'. Schaefer (1949, p. 26) and Bellamy (1985, p. 408) supported Commission action to designate *B. octoguttata* as the type of *Buprestis*. Despite these statements an application to the Commission has not been made until now.

8. Cobos (1986, p. 112) noted the inclusion of 600 valid species worldwide in *Chrysobothris* and 80 species in *Buprestis*. There has been a considerable amount of literature published on a number of the common species included in the genera, both taxonomic and ecological (see, for example, Casey, 1909, p. 51; Arnett, 1962, p. 486;

Bílý, 1989, pp. 42, 66; Bright, 1987, p. 94. A list of a further eight references, all except one (1949) published since 1971, is held by the Commission Secretariat). Several species are economic pests (for example, *Buprestis aurulenta* Linnaeus, *B. apricans* Herbst, *Chrysobothris femorata* (Olivier) and *C. mali* Horn) and much applied literature has been published on these (see, for example, Knull, 1950, p. 192; Furniss & Carolin, 1977, p. 257). A transfer of the name *Buprestis* to the genus currently called *Chrysobothris*, and *Ancylochira* Eschscholtz used in place of *Buprestis* (para. 6 above), would result in great confusion. *Buprestis* and *Chrysobothris* are the type genera of the family-group taxa BUPRESTIDAE Leach, 1815 and CHRYSOBOTHRINI Gory & Laporte, [1839] respectively.

9. It has already been proposed (BZN **49**: 121) that *Chrysobothris* Eschscholtz, 1829 and the name of its type species *Buprestis chrysostigma* Linnaeus, 1758 be placed on the appropriate Official Lists.

10. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Buprestis* Linnaeus, 1758 and to designate *Buprestis octoguttata* Linnaeus, 1758 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Buprestis* Linnaeus, 1758 (gender: feminine), type species by designation in (1) above *Buprestis octoguttata* Linnaeus, 1758;

(3) to place on the Official List of Specific Names in Zoology the name *octoguttata* Linnaeus, 1758, as published in the binomen *Buprestis octoguttata* Linnaeus, 1758 (specific name of the type species of *Buprestis*);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Odontomus* Kirby, 1837 (a junior objective synonym of *Chrysobothris* Eschscholtz, 1829).

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Case 2837/1

Poecilonota Eschscholtz, 1829, *Palmar* Schaefer, 1949 and *Scintillatrix* Obenberger, 1956 (Insecta, Coleoptera): proposed conservation by the designation of *Buprestis variolosa* Paykull, [1799] as the type species of *Poecilonota* and *B. rutilans* Fabricius, [1777] as the type species of *Scintillatrix*

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Abstract. The purpose of this application is to conserve the current understanding and usage of the names *Poecilonota* Eschscholtz, 1829, *Palmar* Schaefer, 1949 and *Scintillatrix* Obenberger, 1956 (family BUPRESTIDAE Leach, 1815, jewel beetles) by designating *Buprestis variolosa* Paykull, [1799] as the type species of *Poecilonota* and *B. rutilans* Fabricius, [1777] as the type species of *Scintillatrix*. At present *B. rutilans* is the valid type species of *Poecilonota* and *B. festiva* Linnaeus, 1767 is the type of both *Palmar* and *Scintillatrix*. Both *Poecilonota* and *Scintillatrix* have worldwide distribution, whilst *Palmar* is Palaearctic in distribution. All three genera include species which are pests of plants; *Scintillatrix rutilans* in particular causes serious damage to old trees of the lime *Tilia cordata*.

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1. In 1829 Eschscholtz (p. 9) established the genus *Poecilonota*. He briefly described the taxon and included two species, *Buprestis conspersa* Gyllenhall, 1808 (p. 441, who cited *B. variolosa* Paykull, [1799], p. 219 as a synonym) and *B. rutilans* Fabricius, [1777] (p. 235). Westwood ([1838], p. 24) gave *rutilans* as 'the typical species' of the genus. The type species designations in Westwood's *Synopsis of the genera of British insects* were accepted as valid in Opinion 71 (January 1922) but, as explained below, *Poecilonota* has not been used in the sense of having *B. rutilans* as the type. The dates of publication of Westwood's work were set out in Direction 63 (June 1957).

2. In 1833 Dejean (p. 78) introduced the name *Lampra* for a genus and included four species, *Buprestis conspersa* (with *B. variolosa* Paykull as a synonym), *B. rutilans*, *B. festiva* 'Fabr.' (i.e. Fabricius, 1775, p. 223, who cited Linnaeus, 1767, p. 663) and *decipiens* Dejean. The generic name was not accompanied by a diagnosis, description or illustration but since three of the included nominal species can be identified by citations of their authors it meets the requirements of availability under Article 12b(5) of the Code. Boisduval & Lacordaire (1835, p. 595) gave the first description of the genus *Lampra* and included in it *conspersa* and *rutilans*. As noted in para. 6 below *Lampra* was in fact an invalid name.

3. Spinola (1837, pp. 108–109) established two subdivisions within *Lampra*, the first for *conspersa* (= *variolosa*) and the second for *rutilans* and *festiva*. Marseul (1865, pp. 151–164) maintained Spinola's two divisions but, in contrast to Westwood's type designation (see para. 1), adopted *Lampra* for both *rutilans* and *festiva* and

Poecilonota for *variolosa*. Since Marseul's (1865) work *Poecilonota* has been used either to include both the *variolosa* group and *Lampra* (the *rutilans* group) or to include only the *variolosa* group of species. It has not been used for the *rutilans* group alone, with the exception of Leraut (1983; see para. 7). Casey (1909, p. 52), Bílý (1982, p. 40) and Cobos (1986, p. 116) gave, albeit incorrectly, *variolosa* as the type species of *Poecilonota*. The name has appeared (applied to the *variolosa* group) in the following recent publications: Volkovitsh (1977, p. 24), Harde (1979, p. 214), Bílý (1989, p. 37) and Weidlich (1989, p. 56). A list of a further 13 references published in the last 50 years is held by the Commission Secretariat.

4. Gistl (1848, p. ix) believed *Lampra* 'Lacordaire' (i.e. Dejean, 1833) to be a junior homonym of the fish name *Lampris* Retzius, 1799 and replaced the buprestid name with the new name *Dendrochariessa*. However, the 1985 Code (and previous editions) states (Article 56b) that even if genus-group names differ by only one letter they are not to be regarded as homonyms. The name *Dendrochariessa* is a senior objective synonym of *Scintillatrix* Obenberger, 1956 (see para. 6 below) but, with the single exception of Leraut (1983) (para. 7), it has not been used. For the sake of stability in the nomenclature I propose that it be suppressed. Neave (1939, p. 36) incorrectly listed *Dendrochariessa* Gistl as a replacement for the coleopteran name *Dendrocharis* Guérin-Méneville, 1843.

5. Casey (1909, p. 52) designated *Buprestis festiva* Linnaeus, 1767 as the type species of *Lampra* Dejean, although this appears not to have been followed. In 1949 Schaefer (p. 167) established *Palmar* as a subgenus of *Lampra* with *festiva* as the type species; he did not mention Casey's work. The name *Palmar* was accompanied by a description (pp. 175–178) and an illustration of a male specimen of *festiva* (pl. 10, fig. 186). Hellrigl (1972, p. 652) discussed the distinguishing features which separated *Palmar* from *Lampra* and elevated *Palmar* to generic rank. The latter has been used for *festiva* and allied species either as a genus or as a subgenus (see, for example, Harde, 1979, p. 419; Bellamy, 1985, p. 419; Cobos, 1986, p. 121. The Commission Secretariat holds a list of a further nine references published within the last 30 years).

6. Since Schaefer's (1949) work *Lampra* Dejean has been used solely for *rutilans* and related species. Richter (1952, p. 66) cited *rutilans* as the type species, although this is invalid because of Casey's designation of *festiva* (see para. 5 above). Until Obenberger (1956) workers appear to have overlooked that *Lampra* Dejean, 1833 is a junior homonym of *Lampra* Hübner, 1821 in Lepidoptera (type species *Phalaena fimbriata* von Schreber, 1759; see Nye, 1975, p. 267). Obenberger (1956, p. 41) replaced Dejean's preoccupied name (in its *rutilans* sense) by the new name *Scintillatrix*. The latter has been used by recent authors including Bílý (1982, p. 71, who noted *rutilans* as the type species; 1989, p. 38), Cobos (1986, p. 118) and Tassi (1966, pp. 213–216). A list of a further eight references published within the last 30 years is held by the Commission Secretariat. Since *Scintillatrix* was a replacement name for *Lampra* Dejean its type species is *B. festiva* because of Casey's (1909) designation for *Lampra* (see para. 5), contrary to Obenberger's intention when establishing it and to the usage since.

7. Leraut (1983) adopted the name *Poecilonota* for the genus presently called *Scintillatrix* (*rutilans* and allied species), thereby giving the name a meaning different from the practice of more than a century (see para. 3 above); he introduced the new name *Descarpentriesina* in place of *Poecilonota* as long understood (the *variolosa*

species group). Leraut also adopted the unused name *Dendrochariessa* Gistl, 1848 in place of *Palmar* (the *festiva* species group), recording *Lampra* and *Scintillatrix* as synonyms, although they have not been used in this sense. With the exception of MacRae (1991, pp. 107–109) the name *Descarpentriesina* has not been used. Although Leraut's system of nomenclature is in formal accord with the Code its adoption would result in great and unnecessary confusion among these buprestid genera.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:
  (a) to set aside all previous fixations of type species for the nominal genus *Poecilonota* Eschscholtz, 1829 and to designate *Buprestis variolosa* Paykull, [1799] as the type species;
  (b) to set aside all previous fixations of type species for the nominal genus *Scintillatrix* Obenberger, 1956 and to designate *Buprestis rutilans* Fabricius, [1777] as the type species;
  (c) to suppress the generic name *Dendrochariessa* Gistl, 1848 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the following names:
  (a) *Poecilonota* Eschscholtz, 1829 (gender: feminine), type species by designation in (1)(a) above *Buprestis variolosa* Paykull, [1799];
  (b) *Scintillatrix* Obenberger, 1956 (gender: feminine), type species by designation in (1)(b) above *Buprestis rutilans* Fabricius, [1777];
  (c) *Palmar* Schaefer, 1949 (gender: feminine), type species by original designation *Buprestis festiva* Linnaeus, 1767;

(3) to place on the Official List of Specific Names in Zoology the following names:
  (a) *variolosa* Paykull, [1799], as published in the binomen *Buprestis variolosa* (specific name of the type species of *Poecilonota* Eschscholtz, 1829);
  (b) *rutilans* Fabricius, [1777], as published in the binomen *Buprestis rutilans* (specific name of the type species of *Scintillatrix* Obenberger, 1956);
  (c) *festiva* Linnaeus, 1767, as published in the binomen *Buprestis festiva* (type species of *Palmar* Schaefer, 1949);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
  (a) *Dendrochariessa* Gistl, 1848, as suppressed in (1)(c) above;
  (b) *Descarpentriesina* Leraut, 1983 (a junior objective synonym of *Poecilonota* Eschscholtz, 1829);
  (c) *Lampra* Dejean, 1833 (a junior homonym of *Lampra* Hübner, 1821).

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Case 2837/2

Melanophila Eschscholtz, 1829 and *Phaenops* Dejean, 1833 (Insecta, Coleoptera): proposed conservation of usage by the designation of *Buprestis acuminata* De Geer, 1774 as the type species of *Melanophila*

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Abstract. The purpose of this application is to conserve the current understanding and usage of the names *Melanophila* Eschscholtz, 1829 and *Phaenops* Dejean, 1833 (family BUPRESTIDAE Leach, 1815, jewel beetles) by designating *Buprestis acuminata* De Geer, 1774 as the type species of *Melanophila*. At present *Melanophila* and *Phaenops* are both typified by *B. cyanea* Fabricius, 1774. Both genera have a worldwide distribution. Most species of *Melanophila* are Nearctic and Neotropical and most of *Phaenops* are Palaearctic. *M. acuminata*, the larvae of which feed on conifers and broadleaved trees, has the widest distribution of buprestid species.

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1. Eschscholtz (1829, p. 9) briefly described and named the genus *Melanophila*. He included two nominal species, *Buprestis tarda* and *B. appendiculata*, both of Fabricius (1792, pp. 209 and 210 respectively). Westwood ([1838], p. 24) gave *B. tarda* as 'the typical species' of *Melanophila*. The type species designations in Westwood's *Synopsis of the genera of British insects* were accepted as valid in Opinion 71 (January 1922) although *Melanophila* has never been used in the sense of *tarda* as the type species (see paras. 5 and 7 below). The dates of publication of Westwood's work were set out in Direction 63 (June 1957).

2. Dejean (1833, p. 79) established the name *Phaenops* and included seven species, among them *Buprestis tarda* (with *B. cyanea* Fabricius, 1775, p. 223 as a synonym), *B. appendiculata* and *B. decostigma* Fabricius, 1787 (p. 180; misspelt as '*decastigma*' by many subsequent authors). The name *Phaenops* was not accompanied by a diagnosis, description or illustration but since included nominal species can be identified by citations of their authors it meets the requirements of availability under Article 12b(5) of the Code.

3. Kirby (1837, p. 160) established *Oxypteris* as a subgenus of *Buprestis*; he designated *B. appendiculata* Fabricius, 1792 as the type species. Kirby synonymised *appendiculata* with *Buprestis acuminata* De Geer, 1774 (p. 133) and this has been accepted by all later authors. Kirby (p. 158) also established *Trachypteris* as a further subgenus of *Buprestis*; *B. decostigma* Fabricius, 1787 was designated as the type species.

4. Laporte & Gory ([1838], p. 4) established the genus *Apatura* to include 15 species, among them *tarda* (= *cyanea*), *appendiculata* (= *acuminata*) and *decostigma*. Gory & Laporte ([1840], p. 2) realised that *Melanophila* was the prior name for the taxon and Gory ([1840], p. 73) adopted this name. Duponchel & Chevrolat ([1841], p. 641) designated *appendiculata* as the type species of *Apatura* and noted that it was a junior homonym of *Apatura* Fabricius, 1807 in Lepidoptera.

5. Lacordaire (1857, p. 47) noted that Dejean and other authors had used *Phaenops* rather than *Melanophila*. However, he defined *Phaenops* and restricted it to *tarda*; he did not mention Westwood's ([1838]) selection of the same species as 'typical' of *Melanophila* (see para. 1). Lacordaire retained *appendiculata* (= *acuminata*), *decostigma* and allied species in *Melanophila*. Subsequent authors (Gemminger & Harold, 1869, p. 1384; Saunders, 1870, pp. 1, 10, 24; Saunders, 1871, pp. 47, 49; Kerremans, 1892, pp. 110, 114; Kerremans, 1903, pp. 162–165; Reitter, 1911, p. 186) followed this taxonomic arrangement. Kiesenwetter (1857, p. 74) synonymised *decostigma* with *Buprestis picta* Pallas, 1773 (p. 719); this synonymy has been accepted by very nearly all later authors, exceptions being Richter (1949) and Cobos (1986, 1987) (see para. 6 below).

6. Recent authors, with the single exception of Leraut (1983), have consistently used *Melanophila* for *acuminata* and related species and *Phaenops* for the *cyanea* (= *tarda*) group of species. Théry (1942, p. 73) designated *cyanea* as the type species of *Phaenops*, whilst Richter (1949, p. 227), Schaefer (1949, p. 216), Bílý (1982, p. 42) and Cobos (1986, p. 186) gave, albeit incorrectly, *acuminata* as the type of *Melanophila*. The names *Melanophila* and *Phaenops*, sensu *acuminata* and *cyanea* respectively, have been used by Tassi (1966, p. 19), Volkovitsh (1977, p. 24), Harde (1979, pp. 219, 220), Bellamy (1985, p. 420), Bílý (1989, p. 45) and Weidlich (1989, p. 58). A list of a further 10 references published in the last 30 years is held by the Commission Secretariat. Most of the authors cited above, and all those cited in para. 4, did not distinguish *Trachypteris* Kirby from *Melanophila*. The exceptions are Richter (1949, pp. 230–238) who maintained *Trachypteris* as a subgenus to include *picta* and *decostigma*, and Cobos (1986, p. 187; 1987, pp. 79–86) who, in his recent revision of the BUPRESTIDAE, treated *Trachypteris* as a monospecific genus for *picta* (with *decostigma* as one of a number of subspecies).

7. Leraut (1983) adopted the name *Melanophila* for the genus currently called *Phaenops* (the *cyanea* group of species), although the name has not been used in this sense since 1857; he used *Trachypteris* in place of *Melanophila* as long understood (the *acuminata-picta* group of species), citing *Oxypteris* Kirby as a synonym. The usage of the names *Melanophila* and *Phaenops* has been stable and universally accepted for more than 135 years. To my knowledge authors since 1983 have not adopted Leraut's nomenclature for these two buprestid genera; its adoption would cause considerable and unnecessary confusion. Moreover, if *picta* and *decostigma* are separated from *acuminata* and its allies the latter group would need to be renamed *Oxypteris* Kirby, 1837, adding still further confusion, a point which was not mentioned by Leraut.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Melanophila* Eschscholtz, 1829 and to designate *Buprestis acuminata* De Geer, 1774 as the type species;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Melanophila* Eschscholtz, 1829 (gender: feminine), type species by designation in (1) above *Buprestis acuminata* De Geer, 1774;
   (b) *Phaenops* Dejean, 1833 (gender: feminine), type species by designation by Théry (1942) *Buprestis cyanea* Fabricius, 1775;

(3) to place on the Official List of Specific Names in Zoology the following names:
(a) *acuminata* De Geer, 1774, as published in the binomen *Buprestis acuminata* (specific name of the type species of *Melanophila* Eschscholtz, 1829);
(b) *cyanea* Fabricius, 1775, as published in the binomen *Buprestis cyanea* (specific name of the type species of *Phaenops* Dejean, 1833).

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Case 2851

Nacaduba Moore, [1881] (Insecta, Lepidoptera): proposed precedence over *Pepliphorus* Hübner, [1819]

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Abstract. The purpose of this application is to conserve the name of the Oriental and Australian lycaenid butterfly genus *Nacaduba* Moore, [1881]. It is proposed that it be given precedence over the senior subjective synonym *Pepliphorus* Hübner, [1819], rarely used in this sense.

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1. *Pepliphorus* Hübner, [1819] (p. 71) was established for two taxonomic species, the first being '698. *Pepliphorus Euchylas. Hylas* Cram.' and the second '699. *P*[*apilio*] *cyanus* Eabr. [error for Fabricius]. *Cyanea* Cram.'; abbreviated references were given leading to *Papilio hylas* Cramer, [1781] (p. 142, pl. 363) and *Papilio cyanea* Cramer, [1775] (p. 120, pl. 76), of which *P. cyanus* Fabricius, 1781 (p. 116) is an unjustified emendation. As noted by Fruhstorfer (1916a, p. 33) Hübner's specific name *euchylas* was a replacement name for *hylas* Cramer; there are at least three senior primary homonyms of the latter, the oldest being *Papilio hylas* Linnaeus, 1758 (p. 486). The synonymy of *euchylas* and *hylas* Cramer was mentioned by Rothschild (1915, p. 138), Toxopeus (1927, p. 267) and D'Abrera (1990, p. 356).

2. Scudder (1875, p. 245) listed *Papilio cyanea* Cramer, [1775] as the type species of *Pepliphorus*; this is a valid designation, but subsequently Waterhouse & Lyell (1914, p. 101) designated *Papilio hylas* Cramer, [1781]. As noted below *Pepliphorus* has been used only in the latter (*euchylas*) sense. It is Scudder's largely ignored designation which has caused the present difficulty.

3. Moore ([1881], p. 88) proposed the genus *Nacaduba* with type species by original designation *Lampides prominens* Moore, 1877 (p. 341); this is currently treated as a subspecies of *Lycaena kurava* Moore, [1858] (p. 22).

4. The name *Nacaduba* has been very widely used in both primary research publications and revisional works (e.g. Fruhstorfer, 1916b; Corbet, 1938; Eliot, 1955, 1973; Tite, 1963; 10 references published since 1981 and additional to those mentioned in this application are held by the Commission Secretariat). *Nacaduba* presently (Hirowatari, 1990) contains 38 species from the Oriental and Australian Regions, including the South Pacific Islands. Recently two species of *Nacaduba*, *N. berenice* (Herrich-Schaeffer, 1869) and *N. normani* Eliot, 1969, have been recorded as pests of cocoa in Sabah, East Malaysia, by Fujii (1987) and Pan & Morishita (1990) respectively.

5. Although Scudder's designation (see para. 2) of *cyanea* as the type species of *Pepliphorus* was noted by Toxopeus (1927, p. 267) and Hemming (1967, p. 351), *Pepliphorus* has scarcely been recorded in this sense; perhaps Bridges's 1988 Catalogue entry is the only instance. Butler (1900, p. 442) referred to '... *Pepliphorus* (*P. hylas*,

Cramer, and allies)...', and as already mentioned (para. 2) Waterhouse & Lyell (1914) invalidly designated *hylas* (= *euchylas*) as the type species. Rothschild (1915) and Fruhstorfer (1916a) used *Pepliphorus* for *euchylas*, as did Joicey & Talbot (1917, under the name *P. hylas*). Toxopeus (1929, p. 230) attempted to deal with the situation by erecting the new genus *Peplodyta* with *Papilio cyanea* Cramer as the type, despite Scudder's identical designation for *Pepliphorus*. In recent years *Pepliphorus* has hardly been used at all, and *euchylas* and allied species have been included in *Jamides* Hübner, [1819] (p. 71) (see, for example, D'Abrera, 1990, p. 355).

6. Because of its external appearance *Papilio cyanea* Cramer has customarily been placed in *Danis* Fabricius, 1807 (or the objectively synonymous *Thysonotis* Hübner, [1819], p. 20) (e.g. Common & Waterhouse, 1981, p. 576) or in *Psychonotis* Toxopeus, 1930 (p. 129) (e.g. D'Abrera, 1990, p. 326); the latter assignment ignores the seniority of *Pepliphorus*. I (Hirowatari, 1987, p. 35) pointed out the close relationship between *cyanea* and species of *Nacaduba*, but temporarily retained *Pepliphorus* for *cyanea* alone, following Scudder's type species designation. Current studies (Hirowatari, 1992) have shown that there is no morphological difference between *cyanea* and *Nacaduba* species, so that *Pepliphorus* and *Nacaduba* are subjective synonyms. Since *Nacaduba* is a widely used name and *Pepliphorus* is unused for the species currently attributed to *Nacaduba*, I propose that the name *Nacaduba* be given precedence over *Pepliphorus* whenever the two are considered to be synonyms.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to give precedence to the name *Nacaduba* Moore, [1881] over the name *Pepliphorus* Hübner, [1819], whenever the two are considered to be synonyms;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Nacaduba* Moore, [1881] (gender: feminine), type species by original designation *Lampides prominens* Moore, 1877, with the endorsement that it is to be given precedence over *Pepliphorus* Hübner, [1819] whenever the two names are considered to be synonyms;
   (b) *Pepliphorus* Hübner, [1819] (gender: masculine), type species by designation by Scudder (1875) *Papilio cyanea* Cramer, [1775], with the endorsement that it is not to be given priority over *Nacaduba* Moore, [1881] whenever the two names are considered to be synonyms;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *prominens* Moore, 1877, as published in the binomen *Lampides prominens* (specific name of the type species of *Nacaduba* Moore, [1881]);
   (b) *cyanea* Cramer, [1775], as published in the binomen *Papilio cyanea* (specific name of the type species of *Pepliphorus* Hübner, [1819]);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Peplodyta* Toxopeus, 1929 (a junior objective synonym of *Pepliphorus* Hübner, [1819]).

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Case 2852

Banksinella luteolateralis var. *albothorax* Theobald, 1907 (currently *Aedes* (*Neomelaniconion*) *albothorax*), *B. luteolateralis* var. *circumluteola* Theobald, 1908 (currently *A.* (*N.*) *circumluteolus*) and *A.* (*N.*) *mcintoshi* Huang, 1985 (Insecta, Diptera): proposed conservation of the specific names and designation of a neotype for *A.* (*N.*) *albothorax*

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Abstract. The purpose of this application is to conserve the specific names of *Aedes* (*Neomelaniconion*) *albothorax* (Theobald, 1907), *A.* (*N.*) *circumluteolus* (Theobald, 1908) and *A.* (*N.*) *mcintoshi* Huang, 1985 in their accustomed usages. All of these species are common mosquitoes in sub-Saharan Africa; *Aedes circumluteolus* and *A. mcintoshi* are particularly widespread and both have been found infected with several arboviruses.

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1. Theobald (1907, pp. 470–471) described and named the mosquitoes *Banksinella luteolateralis* var. *pallida* and var. *albothorax* on the basis of three female specimens from Inkutu, The Gambia. The two syntype females of *pallida* were described as having pale grey scales on the vertex of the head and pale silvery grey scales on the sides of the scutum. The holotype female of *albothorax* was described as having white scales on the vertex of the head and on the sides of the scutum.

2. Theobald (1908, p. 107) described and named *Banksiella* [sic] *luteolateralis* var. *circumluteola* on the basis of a single female from Transvaal, South Africa. The holotype has pale yellow scales on the vertex of the head and on the sides of the scutum.

3. Edwards (1915, pp. 273–274) reviewed *Banksinella* and considered *pallida* and *albothorax* to be varieties of *Banksinella lineatopennis* (Ludlow, 1905, p. 133), which was originally described from the Philippines. He did not redescribe the varieties or cite specimens of them. He did not mention *circumluteola*, but in his catalog of the CULICIDAE (1932) he listed (p. 172) *albothorax*, *circumluteola* and *pallida* as varieties of *Aedes* (*Banksinella*) *lineatopennis*. In 1936 Edwards stated (p. 51) that Theobald's 'varieties' *circumluteola* and *albothorax* and perhaps also *pallida* were better treated as species. As before, he did not redescribe these taxa or cite specimens.

4. Edwards (1941, pp. 201–214) revised the Ethiopian species of *Aedes* (*Banksinella*) in his volume *Mosquitoes of the Ethiopian Region*. He considered *circumluteolus* (p. 204) and *albothorax* (p. 205) to be distinct species and reduced *pallida* to synonymy with *albothorax*. It is obvious from his remarks that only one syntype of *Banksinella pallida* remained in existence. In his key to species (p. 202) he used the color of the scales on the sides of the scutum to separate *circumluteolus* and *albothorax*. Edwards remarked that specimens of '*albothorax*' from East Africa differed somewhat from Gambian ones;

his illustration of the male genitalia was based on East African material. Edwards used the name *circumluteolus* for a species that is widespread in sub-Saharan Africa.

5. All subsequent authors have followed Edwards's synonymy of *pallida* with *albothorax*, and the former has not been used since as valid for any taxon in *Aedes*.

6. Huang (1985, pp. 108–120) studied the widespread mosquitoes known as *Aedes* (*Neomelaniconion*) *lineatopennis* (Ludlow, 1905) and concluded that specimens from Africa were specifically distinct from those from the Orient. She described (p. 109) the African species as *Aedes* (*Neomelaniconion*) *mcintoshi*. The holotype male, from Onderstepoort, Transvaal, South Africa, has yellow to golden yellow scales on the vertex of the head and on the sides of the scutum.

7. Although the Code (p. 197) recommends spelling the prefix 'Mc' as 'mac' when forming a zoological name from a personal name bearing this prefix, Huang did not do so, and spelled her specific name as *mcintoshi*. Since *mcintoshi* differs by one letter from *macintoshi*, and since these variant spellings are not deemed to be identical in Article 58 of the Code, *Aedes* (*Neomelaniconion*) *mcintoshi* Huang, 1985 is not to be considered a homonym of *Aedes* (*Ochlerotatus*) *macintoshi* Marks, 1959.

8. I (Zavortink, 1992) studied the holotypes of *albothorax*, *circumluteolus* and *mcintoshi* and the single extant syntype of *pallidus* as part of a taxonomic revision of *Aedes* (*Neomelaniconion*). I concluded that the types of *albothorax* and *circumluteolus* are conspecific and that the types of *pallidus* and *mcintoshi* are specimens of a second widespread species. I argued that the types of *albothorax* and *pallidus* are bleached (faded) specimens of the two species currently called *circumluteolus* and *mcintoshi* respectively. I considered that synonymizing *circumluteolus* with *albothorax* and *mcintoshi* with *pallidus* would disrupt stability and cause confusion, and proposed that existing usage should be maintained.

9. The name *circumluteolus* has been used consistently for the same taxon by mosquito systematists for the 85 years since its original description by Theobald (1908). The species is one of the commonest and most widespread *Aedes* in sub-Saharan Africa (Gillett, 1972, p. 90; Knight & Stone, 1977, p. 120). The name *circumluteolus* also appears frequently in non-taxonomic literature because the species has been found infected with numerous arboviruses (McIntosh, 1971, p. 327).

10. The name *albothorax* has been applied consistently to an East African species with white scales on the vertex of the head and sides of the scutum by all authors since Edwards's (1941) revision of *Aedes* (*Banksinella*).

11. Strict application of the Principle of Priority would require replacement of *circumluteolus* (1908) by *albothorax* (1907) and proposal of a new specific name for the East African *albothorax* of Edwards (1941) and later authors. However, such action would disrupt stability and cause confusion. These problems could be avoided by setting aside the type status of the Gambian holotype of *Aedes albothorax* (Theobald, 1907) and conserving the specific name as currently used by designating a neotype. This would also conserve the name *A. circumluteolus* (Theobald, 1908). I propose as neotype of *A. albothorax* (Theobald, 1907) a female specimen associated with its larval and pupal skins (KEN 166–17) with the following data: progeny rearing, Kenya, Coast Province, 2 kilometers north of Kakuyuni, Lake Mbaratumu [3 12'S, 40 00'E; elevation less than 30 meters; mother collected 23 June 1990, L.P. Lounibos & T.J. Zavortink]. The taxonomic species to which this specimen belongs was redescribed and illustrated as *Aedes* (*Banksinella*) *albothorax* by Edwards (1941, pp. 205–206).

The following characters differentiate this species from other taxa of *Aedes* (*Neomelaniconion*): scales on vertex of head and sides of scutum white; proboscis with long streak of whitish scales on underside; acrostichal bristles not developed; pleural integument dark brown to black; lower mesepimeral bristles of female usually 3–5 (2–7); pleural scale patches small to moderately large, usually yellowish white to tannish white; some or all subspiracular scales broad, flat; posterior surface of mid and hind femora dark-scaled in apical 0.3–0.5; anterior surface of hind femur white-scaled in basal 0.2–0.4; claws of hind tarsus simple; costal vein completely dark-scaled; radial vein with creamy white scales from base to or slightly beyond base of radial sector; plume scales on radial sector, vein R2+3, vein R2, vein R3 and medial vein dark; abdominal terga with broad basal bands of creamy white to yellowish white scales; abdominal sterna completely to nearly completely dark-scaled; coxite of male genitalia broad basally, abruptly narrowed distally and with relatively few (4–12) widely spaced, slender spiniform setae on inner margin. The neotype will be deposited in the collection of the Department of Entomology, California Academy of Sciences, San Francisco, California, U.S.A., as Type no. 16988.

12. *Aedes mcintoshi* is a common mosquito widespread in sub-Saharan Africa (all African localities of '*lineatopennis*' in Knight & Stone, 1977, p. 120) and the species is frequently mentioned (as *lineatopennis* or, since 1985, as *mcintoshi*) in non-taxonomic literature because it is associated with several arboviruses, including Rift Valley Fever virus (McIntosh, 1971, p. 325). Although the name *mcintoshi* was published only eight years ago it is in general current use. It has been applied to this taxon, as its presumed valid name, in a considerable number of publications since its publication in 1985 (e.g. Beier et al., 1990; Cornel, 1991; Gargan, Kamau, Thande & Wagateh, 1989; Jupp & Cornel, 1988; Linthicum et al., 1988; Logan et al., 1991; Patrican & Bailey, 1989; Turell, Faran, Cornet & Bailey, 1988). A further six references have been given to the Commission Secretariat.

13. Strict application of the Principle of Priority would require the replacement of *mcintoshi* by *pallidus*. This would be the second name change for this common African species in less than eight years, and serious confusion could be avoided by the suppression of *pallida* Theobald, 1907.

14. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:
   (a) to set aside the type status of the holotype of *Banksinella luteolateralis albothorax* Theobald, 1907 and to designate as neotype the specimen proposed in para. 11 above;
   (b) to suppress the specific name *pallida* Theobald, 1907, as published in the trinomen *Banksinella luteolateralis* var. *pallida*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place the following names on the Official List of Specific Names in Zoology:
   (a) *albothorax* Theobald, 1907, as published in the trinomen *Banksinella luteolateralis* var. *albothorax* and as defined by the neotype designated in (1)(a) above;
   (b) *circumluteolus* Theobald, 1908, as published in the trinomen *Banksiella* [sic] *luteolateralis* var. *circumluteola*;
   (c) *mcintoshi* Huang, 1985, as published in the binomen *Aedes* (*Neomelaniconion*) *mcintoshi*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *pallida* Theobald, 1907, as published in the trinomen *Banksinella luteolateralis* var. *pallida* and as suppressed in (1)(b) above.

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Case 2836

Oecothea Haliday in Curtis, 1837 (Insecta, Diptera): proposed conservation and designation of *Helomyza fenestralis* Fallén, 1820 as the type species

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Abstract. The purpose of this application is to conserve the generic name of the heleomyzid fly *Oecothea* Haliday in Curtis, 1837 with *Helomyza fenestralis* Fallén, 1820 as its type species. There is lack of agreement on the availability of the name as published in Curtis (1837) and the genus is sometimes spelled *Aecothea* after Haliday (1838).

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1. The generic name '*Oecothea* Hal.' was first mentioned in the Addenda to Curtis (1837, col. 280) after the 17th species (*caesia* M.) of the 1328th numbered genus *Suillia*. Curtis stated in his preface (p. v) that 'the generic and specific names without numbers are considered as synonyms'. It follows that the unnumbered name *Oecothea* was proposed as a synonym of (i.e. part of) *Suillia* Robineau-Desvoidy, 1830. In the Addenda the numbers and names of four British species were given below *Oecothea*: '23 *pallescens* M., 24b *subterranea* Desv., 25 *laeta* M. and 32 *silvatica* M.'. In the main text to Curtis preceding the Addenda (1837, col. 272) the specific name in *Helomyza* immediately following '17 *caesia* M.' was '18 *fenestralis* Fall.'. The relationship of the name *fenestralis* to *Oecothea* was not stated; the absence of the species numbered between 18 and 23 meant that the precise position at which *Oecothea* related to the main text was not indicated. It is not clear that the four species (*pallescens*, *subterranea*, *laeta* and *silvatica*) were originally included in *Oecothea*. We take the pragmatic approach that *Oecothea* Haliday was proposed without any clearly included species.

2. In 1838 Haliday (p. 187) gave the name *Aecothea* as a subgenus of *Helomyza*, accompanied by a short description; he wrote 'C.[urtis] App.[endix] 280', referring to the name printed as *Oecothea* in Curtis (1837, Appendix, col. 280). Thompson & Mathis (1980, p. 86) regarded *Aecothea* as a lapsus for *Oecothea*. We suggest that it was a deliberate transliteration from Greek. Haliday gave *Helomyza fenestralis* Fallén, 1820 as the only British species of the genus.

3. Both spellings have been frequently used in the literature. The name has been spelled *Oecothea* by Westwood (1840), Loew (1862), Aldrich & Darlington (1908), Bezzi (1911), Garrett (1921), Czerny (1924, 1927, 1928), Aldrich (1926, who added that it was 'originally spelled *Aecothea*'), Séguy (1934), Collart (1940), Collin (1943), Gorodkov (1959, 1969, 1984), Papp (1980), Martinek (1987) and Woznica (1991). The name *Aecothea* has been used by Gill (1962, 1965, 1968), Cole (1969), Martinek (1977), Papp (1981), Gill & Peterson (1987) and Okadome (1991).

4. In Opinion 488 (1957) the Commission ruled that type species of genera were not to be taken as having been fixed in Curtis (1837). Thompson & Mathis (1980, p. 86) considered that the four specific names printed after *Oecothea* in the Addenda to Curtis (1837) were associated with that genus. They pointed out that the frequent use of *fenestralis* as type species of *Oecothea* was not valid since it was not an originally included (i.e. 1837) species, and they designated Curtis's second numbered species (*Leria subterranea* Robineau-Desvoidy, 1830) as the type species of *Oecothea*. However, *L. subterranea* is a nomen dubium within *Heleomyza* Fallén, 1810, and consequently the name *Oecothea* was regarded as a junior synonym of *Heleomyza*. If *L. subterranea* is taken as the type species of *Oecothea* then the genus typified by *Helomyza fenestralis* (i.e. the *Oecothea* of authors) is left without a name, as noted by Thompson & Mathis.

5. Peterson & Gill (1982) accepted Thompson & Mathis's designation of *Leria subterranea* as the type species of *Oecothea*. They (p. 219) proposed a new name *Neoecothea* for *Oecothea* of authors, not Haliday in Curtis (1837) in the sense of Thompson & Mathis. Peterson & Gill explained clearly the sense in which they used the name *Neoecothea* and designated *Helomyza fenestralis* Fallén, 1820 as its type species. McAlpine (1985, p. 206) accepted that Peterson & Gill's intention was to propose *Neoecothea* as a replacement for *Oecothea* in the *fenestralis* sense and accordingly synonymized *Neoecothea* with *Aecothea* Haliday, 1838. The name *Neoecothea* was used by Pitkin (1989), but was not followed by Gill & Peterson (1987).

6. *Helomyza fenestralis* Fallén, 1820 has often been used as the type species of *Oecothea* (first by Westwood, 1840, p. 145), but without any clear indication that it referred to the name proposed by Haliday in Curtis (1837). The first explicit designation of *Helomyza fenestralis* as the type species of *Oecothea* Haliday in Curtis, 1837 was made by Gorodkov (1984, p. 18), but he qualified this designation with the words 'will be proposed for designation under the plenary powers'. We consider that the most effective resolution of this confusion would be the acceptance of *Oecothea* Haliday in Curtis, 1837 as an available name with *Helomyza fenestralis* Fallén as the type species.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:
  (a) to rule that the name *Oecothea* is deemed to have been made available in Curtis (1837);
  (b) to rule that the authorship of *Oecothea* is deemed to be Haliday in Curtis;
  (c) to set aside all fixations of type species for the nominal genus *Oecothea* Haliday in Curtis, 1837 prior to the qualified designation by Gorodkov (1984) of *Helomyza fenestralis* Fallén, 1820 and to rule that designation as valid;

(2) to place on the Official List of Generic Names in Zoology the name *Oecothea* Haliday, in Curtis, 1837 (gender: feminine), type species by subsequent designation by Gorodkov (1984) *Helomyza fenestralis* Fallén, 1820 as ruled in (1)(c) above;

(3) to place on the Official List of Specific Names in Zoology the name *fenestralis* Fallén, 1820, as published in the binomen *Helomyza fenestralis* (specific name of the type species of *Oecothea* Haliday in Curtis, 1837);

(4) to place the following names on the Official Index of Rejected and Invalid Generic Names in Zoology:
  (a) *Aecothea* Haliday, 1838 (a junior objective synonym of *Oecothea* Haliday in Curtis, 1837);
  (b) *Neoecothea* Peterson & Gill, 1982 (a junior objective synonym of *Oecothea* Haliday in Curtis, 1837).

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Case 2816

Catharacta antarctica lonnbergi Mathews, 1912 (currently *Catharacta skua lonnbergi*; Aves, Charadriiformes): proposed conservation of the subspecific name

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Abstract. The purpose of this application is to conserve the subspecific name of *Catharacta skua lonnbergi* Mathews, 1912 (family STERCORARIIDAE). The name is in universal usage for the brown skua of the subantarctic region but is threatened by the unused senior subjective synonym *Stercorarius antarcticus madagascariensis* Bonaparte, 1856, for which suppression is proposed.

Résumé. L'objet de cette requête est de conserver le nom subspécifique de *Catharacta skua lonnbergi* Mathews, 1912 (famille des STERCORARIIDAE). Ce nom, dont l'usage est couramment accepté pour le Skua brun de la région subantarctique, est menacé par le nom inemployé *Stercorarius antarcticus madagascariensis* Bonaparte, 1856, synonyme subjectif plus ancien, dont on propose ici la suppression.

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1. Bonaparte (1856, p. 207) described a skua obtained off the coasts of Madagascar and named it as a subspecies *madagascariensis* of *Stercorarius antarcticus* (Lesson, 1831) (p. 616). The completed vol. 2 of Bonaparte's work is dated 1857. However, dates printed with the signatures indicate that it was published in parts between 1854 and 1856 (see also Woodward, 1903, p. 194). Pages 193–232 of vol. 2 bear the date 1856 and this has been adopted here for the name *madagascariensis*. The name was largely ignored by subsequent authors and Saunders (1876, pp. 321–322; 1896, p. 320) synonymized it with *S. antarcticus*. Hartlaub (1877, pp. 380–382) accepted the synonymy and published measurements of Bonaparte's specimen (no. 1992 392 in the Muséum National d'Histoire Naturelle, Paris).

2. Mathews (1912 (January), p. 212) described *Catharacta antarctica lönnbergi* based on a single bird (specimen no. 3755) from 'New Zealand Seas'. This specimen, an

adult male formerly part of the Rothschild collection, is in the collection of the American Museum of Natural History, catalogue no. 744457. Mathews also described the egg (1912 (April), p. 55). A year later (1913, p. 484) he elevated the taxon to specific rank and (p. 494) proposed three subspecies: *C. l. lonnbergi* (pl. 122) from New Zealand, *C. l. intercedens* from the Kerguelen Islands and *C. l. clarkei* from the South Orkneys. However, he has been little followed; Hamilton (1934, p. 174) synonymized *intercedens* and *clarkei* with the nominate *lonnbergi* and treated this as a subspecies of *Catharacta skua* Brünnich, 1764. Since Hamilton's work the taxon *lonnbergi* has been variously considered to be a species, or a subspecies of either *skua* or *antarcticus*. These taxa have been included either in *Stercorarius* Brisson, 1760 or in *Catharacta* Brünnich, 1764. Today most authors agree on the trinomen *C. skua lonnbergi*, in accordance with the taxonomic conclusions of Hamilton (1934), Devillers (1978) and Furness (1987).

3. Brooke (1978, p. 296; 1981, p. 144) resurrected the name *madagascariensis* Bonaparte, 1856 and, on the grounds of a re-examination of the holotype by Dr J.-L. Mougin and by Drs C. and J.-F. Voisin, adopted it as a senior synonym of *C. skua lonnbergi*. This was followed by Voisin (1979, p. 79 and footnote; 1984, p. 15), but Clancey (1981, p. 197) continued to use the name *lonnbergi*, noting *madagascariensis* as a synonym. Brooke did not publish measurements for the type specimen of *madagascariensis*, the identity of which has long been controversial. Those given by Hartlaub (1877) suggest that it is a specimen of the South Polar skua *C. maccormicki* (Saunders, 1893) (p. xii), rather than the brown skua, even if its culmen length is somewhat long for that species (Furness, 1987). Our own measurements of the same specimen (culmen length 56.5 mm, tarsus length 85 mm, middle toe 76 mm, wing length (tip broken) 370 and 365 mm) do not agree with those of Hartlaub; they bring Bonaparte's specimen well within the size range of *C. skua lonnbergi* and completely out of that of *C. maccormicki* according to the table of measurements given by Furness (1987) and our own observations. Moreover, the shape and sculpture of the bill are clearly those of *C. skua lonnbergi* (Brooke, 1981, personal observations). We do not know why Hartlaub's measurements are so different from our own but our re-examination of Bonaparte's specimen proves beyond doubt that it is a small male of *C. skua lonnbergi* and not of *C. maccormicki*, as has already been stated by Brooke (1978, 1981). If tarsus length, which is the most diagnostic character in discriminating *Catharacta* specimens (Brooke, 1978; Furness, 1987), is considered alone Bonaparte's specimen could be a New Zealand bird but the fact that it was taken far away from any known breeding ground of the brown skua makes it difficult to apply the name *madagascariensis* to any known breeding population of the species. Many years ago Milne Edwards & Grandidier (1885, p. 644) included *madagascariensis* in *antarcticus* but commented that Bonaparte's specimen was 'remarquablement petit'.

4. Strict adherence to the Principle of Priority would lead to the very undesirable introduction of the name *Catharacta skua madagascariensis* (Bonaparte, 1856) for the taxon which until now has consistently been called *lonnbergi* Mathews, 1912. The name *madagascariensis* has rarely been used whereas *lonnbergi* has been used by almost all authors, particularly since Hamilton's (1934) work. The name has appeared in check lists as well as taxonomic and ecological works (see, for example, Peters, 1934, p. 310; Holgersen, 1957; Downes, Ealey, Gwynn & Young, 1959, pp. 103–111; McLachlan & Liversidge, 1978, p. 204; Parmelee, 1985; Pietz, 1987; Sibley & Monroe, 1990, pp. 253–254). A list of a further 18 references published in the last 40 years demonstrating

usage of the name is held by the Commission Secretariat. The taxonomy of the skuas is most difficult to interpret and has taken a considerable effort to clarify; the use of *madagascariensis* instead of (or, more likely, in addition to) the accepted name *lonnbergi* would add confusion to this complex taxonomic situation.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the subspecific name *madagascariensis* Bonaparte, 1856, as published in the trinomen *Stercorarius antarcticus madagascariensis*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *lonnbergi* Mathews, 1912, as published in the trinomen *Catharacta antarctica lönnbergi*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *madagascariensis* Bonaparte, 1856, as published in the trinomen *Stercorarius antarcticus madagascariensis* and as suppressed in (1) above.

Acknowledgements

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Comment on the proposal to remove the homonymy between CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda)
(Case 2710; see BZN **48**: 192–195; **49**: 144–145, 222–223)

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The family-group name CLAVIDAE McCrady, 1859 is universally used in the hydroid literature. The family includes *Clava*, common and well known intertidal hydroids, as well as several other well known genera. Since the family name is based on this well known generic name it would be troublesome and illogical to allow the mollusc subfamily name, which is junior, to replace it. I therefore support the application.

Comments on the proposed designation of *Potamolithus rushii* Pilsbry, 1896 as the type species of *Potamolithus* Pilsbry, 1896 (Mollusca, Gastropoda)
(Case 2801; see BZN **49**: 109–111)

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I write to comment on the recently published application by Lopez Armengol & Manceñido in which they proposed that publication of the name *Potamolithus* be taken from Pilsbry's second (1896, December) paper, and that Pilsbry's invalid designation of *P. rushii* Pilsbry, 1896 as the type species of the genus be accepted as valid. In fact there already exists a valid type designation for *Potamolithus*, that by Clench (1948, p. 105). Clench clearly explained the situation concerning publication of the generic name and selected *Paludina lapidum* d'Orbigny, 1835, one of the originally included nominal species, as the type. Clench's action satisfies Article 69a of the Code regarding the subsequent designation of type species.

It is indeed unfortunate that this action was overlooked by Parodiz (1955) and other South American authors (paras. 1 and 3 of the application). Zilch (1960, p. 826), however, in his 'Berichtigungen . . .' to Wenz's generic treatment of prosobranch gastropods in the *Handbuch der Paläozoologie* did note the valid type species.

Unless the Commission is willing to set aside a valid type species designation (that of Clench), then the published proposals cannot be justified.

Additional references

Clench, W.J. 1948. The genotype of *Potamolithus* Pilsbry. *The Nautilus*, **61**(3): 105.

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We thank Dr Kabat for bringing to our attention a most relevant piece of information. A few additional observations are pertinent.

1. Authorship of the nominal taxon *Potamolithus* for which Clench's (1948) overlooked type designation applies should be credited to Pilsbry & Rush (November, 1896), rather than to Pilsbry (December, 1896) (paras. 1 and 2 of the application).

2. *Potamolithus rushii* has been considered (for right or wrong) as the type species of *Potamolithus* for almost a century (para. 3). It seems unfair to blame oversight of the earlier designation on 'South American authors' alone. Some 40% of those cited (para. 3) cannot be considered as such. In addition, Clench's dual citations of type species appear odd: Clench & Turner (1962) gave *rushii* as the type, as noted in para. 3. It is possible that in 1962 Clench had simply forgotten about his own earlier paper.

3. *Potamolithus lapidum* (d'Orbigny, 1835) is a well-known, easily collectable species with extant type specimens housed in the Natural History Museum, London (catalogue no. 1854.12.4.339, d'Orbigny collection, from Buenos Aires province, Argentina). Pons da Silva & Davis (1983, p. 143) designated a lectotype, which was re-illustrated (text-fig. 26) alongside three of the paralectotypes (text-figs. 27–29), thus stabilizing interpretation of the taxon.

4. Any potential risks of *P. lapidum* and *P. rushii* being eventually recognized as belonging to different (sub)genera (as might be inferred from the distinct supra-specific groupings of Pilsbry, 1911 and Figueiras, 1964) are lessened by Parodiz's (1965a) arrangement in which both species were attributed to the same species-group.

The earlier designation noted by Kabat is technically objection-free and taxonomically acceptable inasmuch as *lapidum* and *rushii* are both currently within the scope of the genus *Potamolithus*. However, our published proposals would preserve more faithfully Pilsbry's original intentions and a long established subsequent usage. Therefore the issue of an Opinion to settle the matter is now even more desirable. At the present state of knowledge the two alternatives do not entail substantially different immediate consequences, yet each has its own merits and drawbacks. Rescuing Clench's valid action from virtual oblivion has the advantage that it does not involve resorting to the Commission's plenary powers, yet *lapidum* has been recognized as the type by only one (Zilch, 1960) out of 10 workers during the last 45 years and was not adhered to even by Clench himself. To 'legalize' existing usage of *rushii* as the type requires intervention by the Commission (the proposals in para. 5), but this would obviate the risk of a shift in generic concept resulting from a change in the previously recognized type.

We would welcome the views of fellow scientists and are prepared to accept the course which is most supported.

Additional reference

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Comments on the proposed attribution of the specific name of *Ceratites nodosus* (Cephalopoda, Ammonoidea) to Schlotheim, 1813, with the designation of a lectotype (Case 2732; see BZN **48**: 31–35, 246; **49**: 145–149, 290)

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Ceratites nodosus, as used today, is a very important index fossil in the biostratigraphy of the Triassic Muschelkalk Group. This name has been used in the maps and publications concerning the stratigraphy of the uppermost Muschelkalk Group. To shift the name *nodosus* to the taxon known today as *Ceratites* (*Doloceratites*) *robustus robustus* (as prescribed by the Code and following the paper of Rieber & Tozer, 1986) would seriously disturb biostratigraphic practice (see Dünkel & Vath, 1990, p. 120). Therefore the Muschelkalk Working Group of the German Perm-Trias Stratigraphy Subcommission (of which I am Co-ordinator) supports the proposal of Dr Urlichs to conserve *C. nodosus* in the sense used today.

Additional reference

Dünkel, H. & Vath, U. 1990. Ein vollständiges Profil des Muschelkalks (Mitteltrias) der Dransfelder Hochfläche, S.W. Göttingen (Südniedersachsen). *Geologisches Jahrbuch Hessen*, **118**: 87–126.

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We have followed the discussion about the holotype of *Ceratites nodosus* with great interest. The problem has been outlined by Urlichs and by Tozer, with very different conclusions. Our position is in favour of the opinion of Urlichs, since the terminology of local geology and collections would be seriously affected by Tozer's solution.

We strongly advocate the retention of *Ceratites nodosus* Schlotheim, 1813, defined by the proposed lectotype of Urlichs & Mundlos (1987), and the suppression of Bruguière's authorship of *Ammonites nodosa*, for the following reasons:

(1) *Ceratites nodosus* has been used for decades in the sense of Schlotheim, and not for specimens similar to the rediscovered holotype of Scheuchzer; the different opinion of Tozer is due to a series of misunderstandings. Numerous examples from the recent literature (see para. 10 of the application) prove the current usage of *Ceratites nodosus* in the sense of Schlotheim's specimen proposed as lectotype in the application.

(2) If the name *Ceratites nodosus* were to be used for specimens conspecific with Scheuchzer's type, comprehensive and complex changes in the definition of subgenera and species of *Ceratites* would be unavoidable (BZN **48**: 33, para. 9). In addition, the *nodosus*-Zone as a biostratigraphical unit would have to be displaced to a different Stage, with consequences hard to envisage.

For these reasons we ask the Commission to retain the species name in the present accepted sense, i.e. to adopt the proposals on BZN **48**: 34.

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I offer this comment with the intention of helping the Commission to see clearly the issues involved in this case.

1. First, Urlichs writes as though two nominal species are involved, *Ammonites nodosa* Bruguière, 1789 and *Ammonites nodosus* Schlotheim, 1813. This position is difficult to maintain, since both Bruguière and Schlotheim based their species, in part, on Scheuchzer's specimen figured by him in 1718. There is therefore only one nominal species involved.

2. Secondly, what specimen is to be the name-bearing type of this nominal species? In 1986 Rieber & Tozer announced the discovery of Scheuchzer's figured specimen (no. L/1651 in the Paläontologisches Museum, Zürich), which was explicitly referred to by Bruguière in his description of *A. nodosa* and by Schlotheim in his description of *A. nodosus*. Rieber & Tozer (p. 831) validly designated this specimen as lectotype (see BZN **48**: 33, paras. 9 and 10); it agrees with the usage established by Philippi (1901), Spath (1934) and Wenger (1957). Urlichs & Mundlos (1987, p. 7) rejected this and designated an alternative (invalid) lectotype of *A. nodosus* Schlotheim as though this was a separate nominal species from *A. nodosa* Bruguière. Their specimen (no. C785 in the Museum für Naturkunde in the Humboldt Universität, Berlin; see para. 10 of the application) is one of 37 specimens surviving from the 46 identified by Schlotheim as *A. nodosus*. It was not figured by Schlotheim and in fact was first figured by Urlichs & Mundlos (1987, p. 7, fig. 1). It is decorticated and deeply weathered, and it is difficult to see why, if Scheuchzer's specimen is to be rejected and the species is to be attributed to Schlotheim (actions not in accord with the Code), a much more satisfactory specimen cannot be proposed as a neotype to be designated under the Commission's plenary powers.

3. Thirdly, Urlichs & Mundlos (1987) and Urlichs (BZN **48**: 33, para. 10) claim that their proposed lectotype conforms better to current usage than does the Scheuzcher specimen. They say that their proposed lectotype is an example of a species that they regard as the index-species of the so-called *Ceratites nodosus* Zone in the Middle Triassic Muschelkalk Formation of Germany. The Commission dealt sensitively with the stratigraphical implications in the cases of *Echinocorys scutata* (1973; Opinion 993) and *Belemnitella mucronata* (1985; Opinion 1328) and palaeontologists are grateful to them for this. In the present case, however, the issue is not quite so simple.

4. The German Muschelkalk is a formation whose ammonite fauna is comparatively poor (when set against those of other parts of the world) and mainly endemic. The lectotypes proposed by Rieber & Tozer (1986) and by Urlichs & Mundlos (1987) both come from this formation, but there is no information at all about the relative horizons from which they came. Urlichs & Mundlos assert that their specimen comes from a higher horizon (Lower Ladinian) than Scheuchzer's (Upper Anisian) and is thus younger in geological age. Such assertions made in the absence of firm stratigraphical evidence should be treated with the utmost suspicion, since they are based on unprovable phylogenetic assumptions. Many a great reputation and many a towering structure of argument have been reduced to ridicule when based upon

such assertions. Urlichs & Mundlos maintain that Scheuchzer's specimen does not come from the *Ceratites nodosus* Zone, but there is no evidence to support this.

5. If the Commission confirms the validity of Rieber & Tozer's lectotype designation, there is already a name available for the species '*Ceratites nodosus*' (Schlotheim non Scheuchzer) in the sense of Urlichs & Mundlos (1987, p. 4); this is *Ammonites undatus* Reinecke, 1818, p. 86 (see para. 4 of the application, and (c) in para. 9).

6. Finally, illustrations are of the highest importance to palaeontologists and Scheuchzer's figure has influenced them throughout the 19th and 20th centuries. Schlotheim's figured (1823, p. 31, fig. 1) specimen has now been redescribed and reillustrated by Urlichs & Mundlos (1987, fig. 10), but whether the original figure had influence is now irrelevant, because Urlichs & Mundlos have excluded it from consideration in this context: to them it is *Ceratites* (*Acanthoceratites*) *spinosus spinosus* Philippi, 1901. This sits uncomfortably with their basing their concept of *C. nodosus* on Schlotheim's version of the species, for to their predecessors who shared that view Schlotheim's figure would have been of primary importance (see para. 6 and para. 10(b) in the application). In considering its verdict, therefore, the Commission may prefer the nomenclaturally more parsimonious solution and formally confirm Scheuchzer's specimen as lectotype of *Ammonites nodosa* Bruguière.

Additional reference

Reinecke, I.C.M. 1818. *Maris protogaei Nautilos et Argonautas vulgo Cornua Ammonis in agro Coburgico et vicino reperiundos*. 90 pp., 13 pls. Coburg.

Comment on the proposed conservation of usage of generic names in the BUPRESTIDAE (Insecta, Coleoptera)

(Case 2772; see BZN **49**: 120–121, 290; Cases 2837/1 and 2837/2; see BZN **50**: 27–30, 31–34)

Charles L. Bellamy
1651 S. Juniper Street 122, Escondido, California 92025, U.S.A.

I write to support the proposed conservation of the names *Chrysobothris* and *Dicerca*, both of Eschscholtz (1829), as the correct original spellings. Dr Nelson and I have talked about the issues at length; his arguments are valid and I fully support his application to the Commission. In addition I have discussed the case with Herr Hans Mühle, who also applied to the Commission (see footnote on BZN **49**: 120).

I also discussed with Herr Mühle his applications concerning the names *Poecilonota* Eschscholtz, 1829, *Palmar* Schaefer, 1949 and *Scintillatrix* Obenberger, 1956 (Case 2837/1), and *Melanophila* Eschscholtz, 1829 and *Phaenops* Dejean, 1833 (Case 2837/2). Leraut's (1983) publication is causing much trouble within buprestid nomenclature. I am in favor of Commission action. Indeed, I believe it would be in the best interests of stability of nomenclature if the Commission were to suppress all the changes to established usage introduced in that paper.

Comment on the proposed precedence of ANTHRIBIDAE Billberg, 1820 over CHORAGIDAE Kirby, 1819 (Insecta, Coleoptera)
(Case 2795; see BZN **49**: 194–195)

Beverley A. Holloway & Guillermo Kuschel
7 Tropicana Drive, Mt. Roskill, Auckland 1004, New Zealand

We fully endorse Silfverberg's submission to give ANTHRIBIDAE precedence over CHORAGIDAE, for the reasons given in the proposal.

Comment on the proposed designation of *Rhipidocystis baltica* Jaekel, 1901 as the type species of *Rhipidocystis* Jaekel, 1901 (Echinodermata, Eocrinoidea)
(Case 2760; see BZN **49**: 41–42)

(1) R.P.S. Jefferies
Department of Palaeontology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

I support this application. Jaekel's 1901 paper was a confounded muddle which was first sorted out by Hecker (=Gekker) in 1940. As set out in para. 3 of the application, Jaekel's *Rhipidocystis* was composite (including material belonging to three classes and four genera) and his nominal species *R. gigas* does not represent a valid taxon. In the *Treatise on Invertebrate Paleontology* Ubaghs (1968) correctly cited Bather's (1913) designation of *R. gigas* as the type species, but followed Hecker in treating *Rhipidocystis* as being exemplified by *R. baltica*; he re-illustrated the holotype of this species. Bockelie (1981) took the same position, and nowadays everyone accepts *Rhipidocystis* in the sense of *R. baltica*. Nothing but confusion would result from retaining '*R. gigas*' as the type species, and Dr Rozhnov's application should therefore be accepted.

(2) G. Ubaghs
Avenue Bois le Comte 28, 4140 Sprimont, Belgium

I fully support the designation of *Rhipidocystis baltica* Jaekel, 1901 as the type species of the genus *Rhipidocystis* Jaekel, 1901, and agree with Dr Jefferies's comments (above) about this designation.

Comment on the proposed conservation of the specific name of *Rana megapoda* Taylor, 1942 (Amphibia, Anura)
(Case 2821; see BZN **49**: 211–212)

Hobart M. Smith
EPO Biology, University of Colorado, Boulder, Colorado 80309–0334, U.S.A.

The case for conservation of *Rana megapoda* Taylor, 1942 is supported by its usage as valid from 1942 through 1991 in 43 works by 32 different authors (one other work

appeared in 1982 using the incorrect spelling *R. megapodia*). *Rana trilobata* Mocquard, 1899 was used as a valid name in misidentified senses as late as 1983, but its status was uncertain until 1991 when Webb identified it with what has been known for 51 years as *R. megapoda* Taylor, 1942. To allow a name with such a chequered history to replace one of such common and unvarying usage as *R. megapoda* would be a serious affront to nomenclatural stability. Approval of the application is strongly recommended.

Comment on the proposed conservation of some generic names first proposed in *Histoire abrégée des insectes qui se trouvent aux environs de Paris* (Geoffroy, 1762) (Crustacea and Insecta)
(Case 2292; see BZN **48**: 107–134; **49**: 71–72, 149–150, 194, 223–227)

I.M. Kerzhner
Zoological Institute, Russian Academy of Sciences, St Petersburg 199034, Russia

I am grateful to all who have supported my application (BZN **48**: 107–134), including Dr C.W. Sabrosky in a letter to me. I support the simplifying proposals (1)–(3) by Tubbs (BZN **49**: 226, para. 9) that Geoffroy's 1762 generic names be ruled to be available, and if they are accepted by the Commission the proposed citation of the authorship Geoffroy in Müller, 1764 for the suppressed or rejected names will not apply.

There is no reason to treat *Asellus* Geoffroy, 1762 differently from his other names; I do not agree with the suggestion by Holthuis (BZN **49**: 224) that it should be attributed (as has never been done) to Schaeffer's work of 1766. On a point of detail I disagree with LaSalle (BZN **49**: 71–72): the mention of *Eulophus* in the synonymy of a species by Fabricius in 1781 (or previously of another by Linnaeus in 1767) does not constitute inclusion of the species in the genus (Article 69a(i)). Because *Peltis* has universally been attributed to Kugelann (1792) I think it is preferable to conserve this authorship rather than that of Müller (1776) as suggested by Silfverberg (BZN **49**: 224). Except for these points I accept the amendments to my application proposed by LaSalle and by Tubbs.

OPINION 1699

Conus fulmen Reeve, 1843 (Mollusca, Gastropoda): specific name conserved, and *Conus berghausi* Michelotti, 1847 given precedence over *C. demissus* Philippi, 1836

Ruling

(1) Under the plenary powers:

(a) the specific name *modestus* Sowerby, [1833], as published in the binomen *Conus modestus*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(b) the specific name *berghausi* Michelotti, 1847, as published in the binomen *Conus berghausi*, is hereby given precedence over the specific name *demissus* Philippi, 1836, as published in the binomen *Conus demissus*, whenever the two names are considered to be synonyms.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *fulmen* Reeve, 1843, as published in the binomen *Conus fulmen*;

(b) *berghausi* Michelotti, 1847, as published in the binomen *Conus berghausi*, with the endorsement that it is to be given precedence over *demissus* Philippi, 1836, as published in the binomen *Conus demissus*, whenever the two names are considered to be synonyms;

(c) *demissus* Philippi, 1836, as published in the binomen *Conus demissus*, with the endorsement that it is not to be given priority over *berghausi* Michelotti, 1847, as published in the binomen *Conus berghausi*, whenever the two names are considered to be synonyms.

(3) The name *modestus* Sowerby, [1833], as published in the binomen *Conus modestus* and as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2766

An application for the conservation of the specific name of *Conus fulmen* Reeve, 1843, and for *C. berghausi* Michelotti, 1847 to be given precedence over *C. demissus* Philippi, 1836, was received from Prof A.J. Kohn (*University of Washington, Seattle, Washington, U.S.A.*) on 12 March 1990. After correspondence the case was published in BZN **48**: 196–199 (September 1991). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 197–198. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 23: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Kabata, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys (in part), Thompson, Trjapitzin, Uéno, Willink

Negative votes — 5: Bouchet, Cogger, Holthuis, Lehtinen and Macpherson.

No vote was received from Heppell.

Holthuis commented that the two parts of the application should have been presented separately for voting. Štys supported the conservation of *Conus fulmen* but not the precedence of *C. berghausi* over *C. demissus*: the latter two names had apparently not been widely used, both type specimens were extant, and therefore he considered that priority should apply.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

berghausi, *Conus*, Michelotti, 1847, *Natuurkundige Verhandelingen van de Hollandsche Naatschappij der Wetenschappen te Haarlem*, (2)**3**(2): 342.

demissus, *Conus*, Philippi, 1836, *Enumeratio molluscorum Siciliae*, vol. 1, p. 239.

fulmen, *Conus*, Reeve, 1843, Monograph of the genus *Conus*. *In*: *Conchologia iconica; a complete repertory of species*, vol. 1, species no. 215, pl. 39, fig. 215.

modestus, *Conus*, Sowerby, [1833], *The conchological illustrations*, part 28, *Conus*, fig. 19.

OPINION 1700

Laeocochlis Dunker & Metzger, 1874 (Mollusca, Gastropoda): conserved as the correct spelling

Ruling

(1) Under the plenary powers it is hereby ruled that *Laiochochlis*, *Laeochochlis* and *Laiocochlis* are incorrect spellings of *Laeocochlis* Dunker & Metzger, 1874.

(2) The name *Laeocochlis* Dunker & Metzger, 1874 (gender: feminine), type species by monotypy *Laiochochlis* [sic] *pommeraniae* Dunker & Metzger, 1874 (a junior subjective synonym of *Cerithium sinistratum* Nyst, 1835), is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *sinistratum* Nyst, 1835, as published in the binomen *Cerithium sinistratum* (senior subjective synonym of the specific name of *Laiochochlis* [sic] *pommeraniae* Dunker & Metzger, 1874, the type species of *Laeocochlis* Dunker & Metzger, 1874), and as defined by the neotype designated by Glibert (1958), is hereby placed on the Official List of Specific Names in Zoology.

(4) The names *Laiochochlis*, *Laeochochlis* and *Laiocochlis*, all with the authorship Dunker & Metzger, 1874, are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (incorrect spellings of *Laeocochlis* Dunker & Metzger, 1874).

History of Case 2769

An application for the conservation of *Laeocochlis* Dunker & Metzger, 1874 as the correct spelling of the generic name was received from Mr David Heppell (*National Museums of Scotland, Edinburgh, U.K.*) on 6 April 1990. After correspondence the case was published in BZN **48**: 27–30 (March 1991). Notice of the case was sent to appropriate journals.

A comment from Drs Philippe Bouchet (*Muséum National d'Histoire Naturelle, Paris, France*) and Anders Warén (*Naturhistoriska Riksmuseet, Stockholm, Sweden*), published in BZN **48**: 322–323 (December 1991), pointed out that the specific name of *Cerithium sinistratum* Nyst, 1835 was that valid for the type species of the genus (*L. pommeraniae* Dunker & Metzger, 1874), and that *sinistratum* was defined by the neotype designated by Glibert (1958). They noted that both the spellings *Laiochochlis* and *Laiocochlis* had had usage and considered that conservation of *Laiocochlis* would best serve nomenclatural stability.

A reply by Mr Heppell, published in BZN **49**: 70 (March 1992), considered that the Commission should be asked first to rule that *Laiochochlis* and *Laeochochlis* were incorrect spellings, and then to determine the correct spelling of the generic name (*Laeocochlis* or *Laiocochlis*) by a simple majority. The latter spellings had appeared in the same publication (Dunker & Metzger, 1874b).

The suppression of the earliest spelling *Laiochochlis* Dunker & Metzger, 1874a, which had had little use, had been advocated both by Heppell (BZN **48**: 27–30; **49**: 70) and by Bouchet & Warén (BZN **48**: 322–323). This was given on the voting papers as Proposal A. Proposals B and C differed only in the choice between the two spellings *Laeocochlis* and *Laiocochlis*, both of Dunker & Metzger, 1874b (the third

spelling therein, *Laeochochlis*, had not been used). Proposal B was that of Heppell (BZN **48**: 28–29 with amendments; BZN **49**: 70), Proposal C that of Bouchet & Warén (BZN **48**: 322–323).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote. At the close of the voting period on 1 December 1992 the votes were as follows:

Proposal A. Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Hahn and Nielsen.

Proposal B — 14: Bayer, Bock, Cogger, Corliss, Halvorsen, Kabata, Kraus, Mahnert, Martins de Souza, Minelli, Savage, Thompson, Uéno and Willink.

Proposal C — 11: Bouchet, Dupuis, Hahn, Holthuis, Lehtinen, Macpherson, Nye, Ride, Schuster, Štys and Trjapitzin.

No vote was received from Heppell. Cocks and Starobogatov voted for Proposal A but abstained from voting for either B or C. Hahn voted against Proposal A but preferred C rather than B.

Štys commented that, all other things being equal, he preferred *Laiocochlis* over *Laeocochlis* since the former spelling was used for the type genus of the family-group LAIOCOCHLIINAE Golikov & Starobogatov, 1987 (para. 4 of the application).

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Laeochochlis Dunker & Metzger, 1874, *Jahrbücher der Deutschen Malakozoologischen Gesellschaft*, **1**(2): 146 (an incorrect spelling of *Laeocochlis*).

Laiochochlis Dunker & Metzger, 1874, *Nachrichtsblatt der Deutschen Malakozoologischen Gesellschaft*, **6**(1): 7 (an incorrect original spelling of *Laeocochlis*).

Laeocochlis Dunker & Metzger, 1874, *Nachrichtsblatt der Deutschen Malakozoologischen Gesellschaft*, **6**(1): 7 (incorrectly spelled as *Laiochochlis*).

Laiocochlis Dunker & Metzger, 1874, *Jahrbücher der Deutschen Malakozoologischen Gesellschaft*, **1**(2): pl. 7, fig. 3 (an incorrect spelling of *Laeocochlis*).

sinistratum, *Cerithium*, Nyst, 1835, *Recherches sur les coquilles fossiles de la province d'Anvers*, p. 28.

The following is the reference for the designation of the neotype of *Cerithium sinistratum* Nyst, 1835:

Glibert, M. 1958. *Bulletin de l'Institut Royal des Sciences Naturelles de Belgique*, **34**(15): 10.

OPINION 1701

Ptychagnostus Jaekel, 1909 and *Glyptagnostus* Whitehouse, 1936 (Trilobita): accepted usage conserved

Ruling

(1) Under the plenary powers it is hereby ruled that the paper *Über die Agnostiden* by Jaekel is treated:

(a) as though printed so that the definition of *Ptychagnostus* on p. 401 appeared at the top of p. 400;

(b) as having been published in its entirety in 1909.

(2) It is hereby confirmed that the nominal species *Agnostus punctuosus* Angelin, 1851 is the type species by original designation of the nominal genus *Ptychagnostus* Jaekel, 1909.

(3) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Ptychagnostus* Jaekel, 1909 (gender: masculine), type species by original designation *Agnostus punctuosus* Angelin, 1851, as confirmed in (2) above;

(b) *Glyptagnostus* Whitehouse, 1936 (gender: masculine), type species by original designation *Glyptagnostus toreuma* Whitehouse, 1936.

(4) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *punctuosus* Angelin, 1851, as published in the binomen *Agnostus punctuosus* (specific name of the type species of *Ptychagnostus* Jaekel, 1909);

(b) *toreuma* Whitehouse, 1936, as published in the binomen *Glyptagnostus toreuma* (specific name of the type species of *Glyptagnostus* Whitehouse, 1936).

(5) The paper *Über die Agnostiden* by Jaekel (1909) is hereby placed on the Official List of Works Approved as Available for Zoological Nomenclature.

History of Case 2805

An application for the conservation of the accepted usage of *Ptychagnostus* Jaekel, 1909 and *Glyptagnostus* Whitehouse, 1936 was received from Drs J.H. Shergold and J.R. Laurie (*Bureau of Mineral Resources, Canberra, Australia*) on 28 December 1990. After correspondence the case was published in BZN **48**: 200–202 (September 1991). Notice of the case was sent to appropriate journals. Comments in support from Dr A.W.A. Rushton (*British Geological Survey, Keyworth, Nottingham, U.K.*) and Prof H.B. Whittington (*Sedgwick Museum, University of Cambridge, Cambridge, U.K.*) were published in BZN **49**: 150–151 (June 1992).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 201–202. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Heppell.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Glyptagnostus Whitehouse, 1936, *Memoirs of the Queensland Museum*, **11**: 101.

Ptychagnostus Jaekel, 1909, *Zeitschrift der Deutschen Geologischen Gesellschaft*, **61**: 401.

punctuosus, Agnostus, Angelin, 1851, *Palaeontologia Scandinavica Pars 1. Crustacea Formationis Transitionis*, p. 8.

toreuma, Glyptagnostus, Whitehouse, 1936, *Memoirs of the Queensland Museum*, **11**: 102.

The following is the original reference to the work placed on an Official List by the ruling given in the present Opinion:

Uber die Agnostiden, Jaekel, 1909, *Zeitschrift der Deutschen Geologischen Gesellschaft*, **61**: 380–401.

OPINION 1702

Asaphus eichwaldi Fischer von Waldheim in Eichwald, 1825 (currently *Paladin eichwaldi*; Trilobita): neotype designation conserved

Ruling

(1) It is hereby confirmed that the specific name *eichwaldi* Fischer von Waldheim in Eichwald, 1825, as published in the binomen *Asaphus eichwaldi*, is to be interpreted by reference to the neotype (specimen no. TML 1557/5107 in the Tshernyshev's Museum, St Petersburg, figured by Weber, 1937, pl. 7, fig. 15) designated by Osmólska (1970).

(2) The name *eichwaldi* Fischer von Waldheim in Eichwald, 1825, as published in the binomen *Asaphus eichwaldi* and as defined by the neotype designated by Osmólska (1970), confirmed in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2778

An application for the confirmation of the neotype designation by Osmólska (1970) for *Asaphus eichwaldi* Fischer von Waldheim in Eichwald, 1825 was received from Prof Gerhard Hahn (*Institut für Geologie und Paläontologie, Philipps-Universität, Marburg, Germany*) on 9 July 1990. After correspondence the case was published in BZN **48**: 203–205 (September 1991). Notice of the case was sent to appropriate journals. A comment in support from Prof H.B. Whittington (*Sedgwick Museum, University of Cambridge, Cambridge, U.K.*) was published in BZN **49**: 150 (June 1992).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 204. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Cocks, Cogger, Corliss, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 4: Bouchet, Dupuis, Lehtinen and Macpherson.

No vote was received from Heppell.

Dupuis commented that it was necessary to make clear which specimen was to be taken as the neotype of *Asaphus eichwaldi* (cf. para. 5 of the application).

Original references

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

eichwaldi, Asaphus; Fischer von Waldheim, 1825, *in* Eichwald, E. von, *Geognostico-zoologicae per ingriam marisque Baltici provincias nec non de trilobitis observationes*, p. 54.

The following is the reference for the designation of the neotype of *Asaphus eichwaldi* Fischer von Waldheim in Eichwald, 1825:

Osmólska, H. 1970. *Palaeontologia Polonica*, **23**: 130 (specimen number misprinted as TML 1551/5107; see BZN **48**: 204).

OPINION 1703

Goniosoma conspersum Perty, 1833 (currently *Mitobates conspersus*; Arachnida, Opiliones): specific name not conserved

Ruling

(1) The name *Mitobates* Sundevall, 1833 (gender: masculine), type species by original designation and by monotypy *Mitobates triangulus* Sundevall, 1833, is hereby placed on the Official List of Generic Names in Zoology.

(2) The name *triangulus* Sundevall, 1833, as published in the binomen *Mitobates triangulus*, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2759

An application for the conservation of the specific name of *Goniosoma conspersum* Perty, December 1833 by suppressing the unused senior subjective synonym *Mitobates triangulus* Sundevall, April 1833 was received from Dr Adriano B. Kury (*Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil*) on 14 February 1990. After correspondence the case was published in BZN **48**: 105–106 (June 1991). Notice of the case was sent to appropriate journals. An opposing comment from Prof L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*), together with a reply by the author of the application, was published in BZN **48**: 323 324 (December 1991).

The application was sent to the Commission for voting on 1 March 1992. The proposals on BZN **48**: 105–106 received a majority (19 votes 'For' and 10 'Against') but just failed to reach the two-thirds majority required (Article 12b of the Constitution) for the suppression of *M. triangulus*. On 1 September 1992 the application was submitted for a revote under the Bylaws.

It was noted on the voting paper that no type material of *M. triangulus*, the nominal type species of *Mitobates* Sundevall, 1833, apparently existed but three syntypes of *G. conspersum* were deposited in Berlin (paras. 1 and 2 of the application). It was also noted that, voting in March 1992 in favour of the application, Cocks commented that he was swayed by the survival of the types of *G. conspersum* and Kabata commented that he was persuaded, albeit reluctantly, because of the inadequacy of the original (unillustrated) description of *M. triangulus* and the absence of any type material.

A proposal to place the name *Mitobates* on the Official List, in accord with usual practice, completed the proposals on BZN **48**: 105–106 and was included on the voting papers circulated in both March and September 1992.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to revote on the proposals published in BZN **48**: 105–106. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 16: Bayer, Bock, Cocks, Cogger, Corliss, Hahn, Halvorsen, Kabata, Kraus, Mahnert, Martins de Souza, Nielsen, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 12: Bouchet, Dupuis, Holthuis, Lehtinen, Macpherson, Minelli, Nye, Ride, Savage, Starobogatov, Štys and Thompson.

No vote was received from Heppell.

Ride commented that a *prima facie* case that stability was threatened had not been established and that one of the syntypes of *Goniosoma conspersum* could be designated as the neotype of *Mitobates triangulus*. Thompson commented that there was insufficient documentation of usage of *M. conspersus* (Perty, 1833) to justify the suppression of *M. triangulus*.

Since the required two-thirds majority was not reached the junior name *Goniosoma conspersum* was not conserved.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Mitobates Sundevall, 1833, *Conspectus arachnidum*, p. 34.

triangulus, *Mitobates*, Sundevall, 1833, *Conspectus arachnidum*, p. 34, footnote.

OPINION 1704

Artemia franciscana Kellogg, 1906 (Crustacea, Branchiopoda): specific name conserved

Ruling

(1) Under the plenary powers:

(a) the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(i) *guildingi* Thompson, 1834, as published in the binomen *Artemis guildingi*;

(ii) *fertilis* Verrill, 1869, as published in the binomen *Artemia fertilis*;

(iii) *utahensis* Lockington, 1876, as published in the binomen *Artemia utahensis*;

(b) the specific name *franciscana* Kellogg, 1906, as published in the binomen *Artemia franciscana*, is hereby given precedence over the specific name *gracilis* Verrill, 1869, as published in the binomen *Artemia gracilis*, whenever the two names are considered to be synonyms.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *franciscana* Kellogg, 1906, as published in the binomen *Artemia franciscana*, with the endorsement that it is to be given precedence over *gracilis* Verrill, 1869, as published in the binomen *Artemia gracilis*, whenever the two names are considered to be synonyms;

(b) *gracilis* Verrill, 1869, as published in the binomen *Artemia gracilis*, with the endorsement that it is not to be given priority over *franciscana* Kellogg, 1906, as published in the binomen *Artemia franciscana*, whenever the two names are considered to be synonyms.

(3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *guildingi* Thompson, 1834, as published in the binomen *Artemis guildingi* and as suppressed in (1)(a)(i) above;

(b) *fertilis* Verrill, 1869, as published in the binomen *Artemia fertilis* and as suppressed in (1)(a)(ii) above;

(c) *utahensis* Lockington, 1876, as published in the binomen *Artemia utahensis* and as suppressed in (1)(a)(iii) above.

History of Case 2728

An application for the conservation of the specific name of *Artemia franciscana* Kellogg, 1906 was received from Prof Denton Belk (*Our Lady of the Lake University of San Antonio, Texas, U.S.A.*) and Dr Sarane T. Bowen (*San Francisco State University, San Francisco, California, U.S.A.*) on 19 June 1989. After correspondence the case was published in BZN **47**: 178–183 (September 1990). Notice of the case was sent to appropriate journals.

Comments in support from Drs P. Sorgeloos, P. Lavens & W. Tackaert (*Artemia Reference Center, Rijksuniversiteit Gent, Gent, Belgium*) and Dr Francisco Amat (*Instituto de Acuicultura de Torre de la Sal, Consejo Superior de Investigaciones*

Cientificas, Castellón, Spain) were published in BZN **48**: 57 (March 1991). A note of further comments in support from Prof C. Barigozzi (*Università degli Studi di Milano, Milano, Italy*), Drs Laura Torrentera Blanco (*University of Wisconsin, Wisconsin, U.S.A.*), A.M. Maeda-Martinez (*Institute of Ecology, University of Gent, Gent, Belgium*) and Graziella Mura (*Università di Roma 'La Sapienza', Roma, Italy*) was published at the same time.

Comments from five members of the Nomenclature Committee of the Crustacean Society were published in BZN **48**: 246–248 (September 1991). Drs Joel W. Martin (*Natural History Museum of Los Angeles County, Los Angeles, California, U.S.A.*) and Gary C.B. Poore (*Museum of Victoria, Abbotsford, Victoria, Australia*) supported the application. Drs Austin B. Williams (*NOAA/NMFS Systematics Laboratory, Smithsonian Institution, Washington, U.S.A.*) and Thomas E. Bowman (*Smithsonian Institution, Washington, U.S.A.*) supported the suppression of the names *Artemia guildingi* Thompson, 1834 and *A. utahensis* Lockington, 1876; Williams thought that *gracilis* Verrill, 1869 should be used, whilst Bowman was in favour of *fertilis* Verrill, 1869. Prof L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) suggested that until the taxonomy and nomenclature of *Artemia* Leach, 1819 as a whole had been reviewed it was premature to deal with the single species *A. franciscana*.

A reply to Bowman's and Holthuis's comments by one of the authors of the application (Prof Denton Belk) was published in BZN **49**: 72–73 (March 1992).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **47**: 180–181. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 22: Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Kabata, Kraus, Macpherson, Mahnert, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Bayer and Holthuis.

Dupuis and Minelli abstained.

No votes were received from Heppell, Lehtinen and Martins de Souza.

Dupuis abstained because of the lack of taxonomic information on *Artemia gracilis* Verrill, 1869 (para. 4 of the application). Minelli commented that conservation of the name *A. franciscana* Kellogg, 1906 would be better considered within the wider perspective of the whole genus *Artemia*.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

fertilis, Artemia, Verrill, 1869, *American Journal of Science and Arts*, (2)**48**: 430.

franciscana, Artemia, Kellogg, 1906, *Science*, (n.s.)**24**: 596.

gracilis, Artemia, Verrill, 1869, *American Journal of Science and Arts*, (2)**48**: 248.

guildingi, Artemis, Thompson, 1834, *Zoological researches and illustrations 1828–1834*, vol. 1, part 1, memoir 6, p. 107.

utahensis, Artemia, Lockington, 1876, *in* [Lawson, H.] (Ed.), *The Monthly Microscopical Journal: Transactions of the Royal Microscopical Society, and Record of Histological Research at Home and Abroad*, **15**: 137.

OPINION 1705

Paolia vetusta Smith, 1871 (Insecta, Protorthoptera): neotype replaced by rediscovered holotype

Ruling

(1) Under the plenary powers the neotype designation made by Laurentiaux (1950) for the nominal species *Paolia vetusta* Smith, 1871 is hereby set aside.

(2) The name *Paolia* Smith, 1871 (gender: feminine), type species by monotypy *Paolia vetusta* Smith, 1871, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *vetusta* Smith, 1871, as published in the binomen *Paolia vetusta* and as defined by the holotype (specimen no. HCM A72/51 in the Hanover College Museum, Hanover, Indiana, U.S.A.) (specific name of the type species of *Paolia* Smith, 1871), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2751

An application to replace the neotype of *Paolia vetusta* Smith, 1871 by the rediscovered holotype was received from Dr C.G. Maples (*Kansas Geological Survey, Lawrence, Kansas, U.S.A.*) on 28 December 1989. After correspondence the case was published in BZN **48**: 210–211 (September 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that, although the holotype of *P. vetusta* came from Indiana and the neotype from the Netherlands, the designation by Laurentiaux (1950) of the latter (para. 2 of the application) met the requirements of Article 75 of the Code. Laurentiaux considered the Dutch 'nouveau génotype' to be the only other known specimen of *P. vetusta*, the type species of *Paolia*.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 211. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Heppell.

Ride commented that his vote was conditional on an assurance 'that the name *P. vetusta* Smith as interpreted by the neotype has not been used in such a way as to render a return to the holotype a cause of instability or confusion'. Dr Maples (21 November 1992) confirmed that a return to the holotype would not result in confusion and noted: 'Shortly after the neotype was erected, Kukalová (1958) declared that the neotype was closely related to, but not, *Paolia vetusta* Smith, 1871 (para. 3 of the application). The neotype has not been used to define the name since that time'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Paolia Smith, 1871, *American Journal of Science and Arts*, (3)**1**: 44.

vetusta, *Paolia*, Smith, 1871, *American Journal of Science and Arts*, (3)**1**: 44.

OPINION 1706

Eurymeloides Ashmead, 1889 (Insecta, Homoptera): *Eurymela bicincta* Erichson, 1842 confirmed as the type species, and a neotype designated for *E. bicincta*

Ruling

(1) Under the plenary powers all previous fixations of type specimens for the nominal species *Eurymela bicincta* Erichson, 1842 are hereby set aside and the specimen in the Bernice P. Bishop Museum, Honolulu, Hawaii, U.S.A. labelled 'Sydney, N.S.W. Austr. m 1 1095; Coll. Koebele; type of *E. bicinctellus* Kirk; *Eurymelias bicinctellus* 544 (Kirk.); neotype *Eurymela bicincta* (Erichson)' is hereby designated as the neotype.

(2) It is hereby confirmed that the nominal species *Eurymela bicincta* Erichson, 1842 is the type species of the nominal genus *Eurymeloides* Ashmead, 1889.

(3) The name *Eurymeloides* Ashmead, 1889 (gender: feminine), type species by subsequent designation by Kirkaldy (1906) *Eurymela bicincta* Erichson, 1842, as confirmed in (2) above, is hereby placed on the Official List of Generic Names in Zoology.

(4) The name *bicincta* Erichson, 1842, as published in the binomen *Eurymela bicincta* and as defined by the neotype designated in (1) above (specific name of the type species of *Eurymeloides* Ashmead, 1889), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2755

An application for the confirmation of *Eurymela bicincta* Erichson, 1842 as the type species of *Eurymeloides* Ashmead, 1889, and the designation of a neotype for *E. bicincta*, was received from Drs M.M. Stevens (*Yanco Agricultural Institute, New South Wales Agriculture and Fisheries, Yanco, Australia*) and M.J. Fletcher (*Biological and Chemical Research Institute, New South Wales Agriculture and Fisheries, Rydalmere, Australia*) on 23 January 1990. After correspondence the case was published in BZN **48**: 212–214 (September 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that Dr Stevens had written (21 May 1991) that, following Evans (1933), the generic name *Eurymelias* Kirkaldy, 1907 had been treated consistently as a junior subjective synonym of *Eurymeloides* Ashmead, 1889 (para. 2 of the application); approval of the application would allow this synonymy to be maintained.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 213. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes – 25: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 3: Bouchet, Lehtinen and Thompson.

No vote was received from Heppell.

Thompson commented: 'The justification for the use of the plenary powers in this case is to preserve the current interpretation (usage) of the name *Eurymeloides*. Unfortunately, insufficient documentation of usage was given in this case, as apparently this name has only been used by three authors in less than 10 papers in the previous 50 years. When usage arguments are made they should be documented with at least five different authors of 10 recent publications. Priority is a principle of not only nomenclature but of science as a whole. Deviation should be made only in exceptional cases. This is not one, nor in my opinion is any application which does not provide adequate documentation of usage'. (*Editorial note*. This was not simply a case of potential replacement of a name by an older unused synonym; it also involved the threatened transfer of the recognized names of two taxa (*Eurymeloides* and *E. bicincta*) to two others (*Platyeurymela* and *P. semifascia*). The type species of *Eurymeloides* was misidentified and the name has never been used in the sense of the recently rediscovered Erichson specimens of 1842. The taxonomic literature on *Eurymeloides* is limited (10 papers mentioned in the application are post-1930), but the EURYMELIDAE are the dominant leafhoppers of Australia (Evans, 1966), where the *Eurymeloides* species live on *Eucalyptus*).

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

bicincta, *Eurymela*, Erichson, 1842, *Archiv für Naturgeschichte*, **8**(1): 286.

Eurymeloides Ashmead, 1899, *Entomologica Americana*, **5**(7): 126.

The following is the reference for the designation of *Eurymela bicincta* Erichson, 1842 as the type species of the nominal genus *Eurymeloides* Ashmead, 1889:

Kirkaldy, G.W. 1906. *Bulletin of the Hawaiian Sugar Planters' Association Experiment Station* (Entomological Series), **1**(9): 354.

OPINION 1707

Scoparipes Signoret, 1880 (Insecta, Heteroptera): *Cydnus latipes* Westwood, 1837 confirmed as the type species

Ruling

(1) It is hereby confirmed that the nominal species *Cydnus latipes* Westwood, 1837 is the type species by original designation of the nominal genus *Scoparipes* Signoret, 1880.

(2) The name *Scoparipes* Signoret, 1880 (gender: masculine), type species *Cydnus latipes* Westwood, 1837 by original designation, as confirmed in (1) above, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *latipes* Westwood, 1837, as published in the binomen *Cydnus latipes* and as defined by the neotype designated by Lis (1990) (specific name of the type species of *Scoparipes* Signoret, 1880), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2754

An application for the confirmation of *Cydnus latipes* Westwood, 1837 as the type species of *Scoparipes* Signoret, 1880 was received from Dr Jerzy A. Lis (*Upper Silesian Museum, Bytom, Poland*) on 23 January 1990. After correspondence the case was published in BZN **48**: 215–216 (September 1991). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 215–216. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Heppell.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

latipes, *Cydnus*, Westwood, 1837, *A catalogue of Hemiptera in the collection of the Rev. F.W. Hope with short Latin descriptions of new species*, part 1, p. 18.

Scoparipes Signoret, 1880, *Annales de la Société Entomologique de France*, (5)**9**(4): clxxiii. (*Bulletin des Séances*. Séance du 24 décembre 1879).

The following is the reference for the designation of the neotype of *Cydnus latipes* Westwood, 1837:

Lis, J.A. 1990. *Annals of the Upper Silesian Museum — Entomology*, **1**: 169.

OPINION 1708

Proagoderus Lansberge, 1883 (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Onthotrogus* Motschulsky, 1859 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Proagoderus* Lansberge, 1883 (gender: masculine), type species by monotypy *Onthophagus* (*Proagoderus*) *ritsemae* Lansberge, 1883, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *ritsemae* Lansberge, 1883, as published in the binomen *Onthophagus* (*Proagoderus*) *ritsemae* (specific name of the type species of *Proagoderus* Lansberge, 1883), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Onthotrogus* Motschulsky, 1859, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2756

An application for the conservation of the name *Proagoderus* Lansberge, 1883 was received from Dr Claudia Palestrini (*Università di Torino, Torino, Italy*) on 1 February 1990. After correspondence the case was published in BZN **48**: 217–218 (September 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that included in the 63 references held by the Commission Secretariat demonstrating usage of the name *Proagoderus* between 1883 and 1988 (para. 4 of the application) were 18 published in the last 50 years.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 217–218. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 23: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Ueno, Willink

Negative votes – 5: Bouchet, Kabata, Lehtinen, Macpherson and Trjapitzin.

No vote was received from Heppell.

Voting for, Ride commented: 'While it is true that "the Code does not authorize the automatic rejection of *nomina oblita*" (para. 5 of the application) the purpose of the Principle of Priority is explicitly stated in Article 23b of the Code. In this case the Commission must accept *prima facie* that stability is threatened'. Voting against, Kabata commented: 'I very much doubt if the revival of the unused senior subjective synonym (*Onthotrogus* Motschulsky, 1859) would result in nomenclatural instability. Consequently I vote with those following priority'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Onthotrogus Motschulsky, 1859, *Études Entomologiques*, **8**: 153.
Proagoderus Lansberge, 1883, *Notes from the Leyden Museum*, **5**: 15.
ritsemae, *Onthophagus* (*Proagoderus*), Lansberge, 1883, *Notes from the Leyden Museum*, **5**: 15.

OPINION 1709

Diabrotica undecimpunctata Mannerheim, 1843 and *D. undecimpunctata howardi* Barber, 1947 (Insecta, Coleoptera): specific and subspecific names conserved

Ruling

(1) Under the plenary powers the specific name *sexpunctata* Fabricius, 1792, as published in the binomen *Crioceris sexpunctata*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *undecimpunctata* Mannerheim, 1843, as published in association with the generic name *Diabrotica* Dejean, [1835] and as defined by the lectotype designated by Smith & Lawrence (1967);

(b) *howardi* Barber, 1947, as published in the trinomen *Diabrotica undecimpunctata howardi*.

(3) The name *sexpunctata* Fabricius, 1792, as published in the binomen *Crioceris sexpunctata* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 1707

An application from Prof Ray F. Smith (*University of California, Berkeley, California, U.S.A.*) for the conservation of the specific name of *Diabrotica undecimpunctata* Mannerheim, 1843 by the rejection of *Crioceris sexpunctata* Fabricius, 1792 was published in BZN **22**: 246–247 (November 1965), together with support from six workers. No further action was taken at that time because the automatic rejection of *nomina oblita* such as *C. sexpunctata* was under review. A revised and expanded application, to include conservation of the subspecific name of *D. undecimpunctata howardi* Barber, 1947, was formulated by Dr P.K. Tubbs (*International Commission on Zoological Nomenclature, c/o The Natural History Museum, London, U.K.*) and published in BZN **48**: 219 221 (September 1991). Notice of the case was sent to appropriate journals. It was noted on the voting paper that the case had the support of Dr Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 220–221. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Heppell.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

howardi, *Diabrotica undecimpunctata*, Barber, 1947, *Proceedings of the Entomological Society of Washington*, **49**: 153.

sexpunctata, *Crioceris*, Fabricius, 1792, *Entomologia systematica emendata et aucta . . .*, vol. 1, part 2, p. 4.

undecimpunctata, *Diabrotica*, Mannerheim, 1843, *Bulletin de la Société Impériale des Naturalistes de Moscou*, **16**: 309.

The following is the reference for the designation of the lectotype of *Diabrotica undecimpunctata* Mannerheim, 1843:

Smith, R.F. & Lawrence, J.F. 1967. *University of California Publications in Entomology*, **45**: 136.

OPINION 1710

J.C. Megerle's (1801–1805) auction catalogues of insects: suppressed for nomenclatural purposes, with the specific names of *Saperda alboguttata* Megerle, 1803 (currently *Apomecyna alboguttata*; Coleoptera) and *Hippobosca variegata* Megerle, 1803 (Diptera) conserved

Ruling

(1) Under the plenary powers:

(a) the works entitled *Catalogus insectorum . . .*, *Appendix ad catalogum insectorum . . .* and *Catalogus duarum collectionem Eleuteratorum . . .* published by Megerle (1801-1805) are hereby suppressed for nomenclatural purposes;

(b) the following specific names are hereby ruled to be available despite having been published in a suppressed work:

(i) *alboguttata* Megerle, 1803, as published in the binomen *Saperda alboguttata*;

(ii) *variegata* Megerle, 1803, as published in the binomen *Hippobosca variegata*.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *alboguttata* Megerle, 1803, as published in the binomen *Saperda alboguttata* and as conserved in (1)(b)(i) above;

(b) *variegata* Megerle, 1803, as published in the binomen *Hippobosca variegata* and as conserved in (1)(b)(ii) above.

(3) The works entitled *Catalogus insectorum . . .*, *Appendix ad catalogum insectorum . . .* and *Catalogus duarum collectionem Eleuteratorum* published by Megerle (1801–1805) and suppressed in (1)(a) above are hereby placed on the Official Index of Rejected and Invalid Works in Zoology.

History of Case 2671

An application for catalogues by J.C. Megerle (1801-1805) to be ruled unavailable for nomenclatural purposes, together with the conservation of the specific names of *Saperda alboguttata* and *Hippobosca variegata*, both of Megerle (1803), was received from Dr I.M. Kerzhner (*Zoological Institute, Academy of Sciences, St Petersburg, Russia*) on 12 July 1988. After correspondence the case was published in BZN **48**: 206–209 (September 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the application had the support of Mr R.D. Pope (Coleoptera) and Dr R.W. Crosskey (Diptera) (both of *The Natural History Museum, London, U.K.*) and Dr Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 208. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

No vote was received from Heppell.

Bayer commented: 'I would oppose the suppression of any *bona fide* scientific work that may have had the misfortune to become rare, but I believe that a good case can be made for rejecting auction catalogues such as those of Megerle. Even though produced by conventional printing and doubtless issued in substantial numbers, their obvious purpose was to sell the items listed rather than 'to provide a permanent scientific record' (Article 8 of the Code). It seems likely that Megerle, even though he was a curator of the Wiener Hofmuseum, was more concerned with selling the catalogued items than with advancing scientific knowledge. It seems to me that this and other auction catalogues could very reasonably be rejected as unavailable on the grounds of not being intended for scientific record'.

Martins de Souza noted that S. Breuning (1960; *Catalogue des lamiaires du monde*, p. 131) gave *Apomecyna histrio* Fabricius, 1792 as a senior subjective synonym of *A. alboguttata* (Megerle, 1803).

Thompson commented as follows: 'Kerzhner requested the suppression of Megerle's catalogs as the acceptance of the names established therein "would greatly disturb the stability of nomenclature". Unfortunately, few data were provided to substantiate this claim. The two references cited in para. 7 (Schenkling, 1935; Horn, 1937) are articles about Megerle, the catalogs, and old auctions and did not address nomenclatural issues. No documentation is provided for the "no less than 20 currently used specific names" that "would be invalid as junior primary homonyms". Data are provided only for two generic names and in both of these cases the situation is not exactly as stated by Kerzhner (para. 7). For the beetle genus there needs only be a change in date (1803 instead of 1807) and spelling (*Doriphora* instead of *Doryphora*) as Megerle attributed the name to Illiger. As for *Centrotus*, Megerle attributed the name to Fabricius. On the problem of type species no details are provided. However, in the case of both these names, the Commission could easily correct the details without having to suppress the work as a whole.

Kerzhner proposed the conservation of two specific names from Megerle but argued (para. 9) that two other specific names that have been recently noted as valid should not be conserved as such action is not "substantiated by usage or to be appropriate". When has the principle of priority become inappropriate and been superseded by that of usage? Neither of these two names is widely used. Accepting *Pyrgota undata* from Megerle (as Wiedemann did himself) does not involve a change of a name in current use; the junior name *Xylota chalybea* Wiedemann has only been used a few times in the last 50 years so it cannot be argued that it is "substantiated by usage", even if usage was a principle that the Code endorsed!

The use of the names published in Megerle's catalogs *may* "greatly disturb the stability of nomenclature" in the future, but so far no evidence has been presented for

such instability. The Commission is asked to suppress publications containing many names because there appear to be problems with two generic names, but to conserve two specific names which are being used currently. The Commission should not suppress works simply because they *may* pose problems and, in the case of actual problems, it should deal with the names, not the works. The Commission suppressed Geoffroy's 1762 *Histoire abrégée des insectes* . . . but eventually has had to rule on each name in that work. If the Commission had dealt with the names instead of the work in the first place much effort would have been saved. So, the Commission should deal with only the Megerle names that pose real problems. So far there has been no evidence presented that *any* Megerle name presents a serious problem to stability of nomenclature'.

Editorial note. As noted in para. 2 of the application, only one original set of Megerle's catalogues is known to exist. In submitting the case Dr Kerzhner wrote: 'With current techniques for making copies these catalogues, which are extreme bibliographic rarities, may receive wide distribution. This represents a serious threat to stability of nomenclature. Proponents of strict priority may find the catalogues grounds for changing dozens of currently used names, although this would of course violate the Code. A recent publication seems to me a real forerunner of this situation; therefore I make haste to submit this proposal, which I have long had in mind'.

The comment from Dr R.W. Crosskey (*Department of Entomology, The Natural History Museum, London*), noted on the voting paper, said (in part): 'We in the Diptera Section are totally *for* the application. It is necessary to conserve Megerle authorship for *Hippobosca variegata*, a very well known Old World ectoparasite. The Commission should immediately support Kerzhner's proposal to head off any digging out of pointless old names from a "work" not intended to be mainstream science and about as obscure as they come'.

In his comment above Dr Thompson mentions that the rejection (not suppression) in 1954 by the Commission of Geoffroy's 1762 work in its entirety was unfortunate and that it would have saved much subsequent effort had the generic names therein been considered individually. There is, however, an essential difference between Geoffroy's volumes and the Megerle catalogues: 40 of the 59 new generic names in the former were and are used as valid (see BZN **48**: 107), whereas the great majority of Megerle's many new names have never been used. Kerzhner (para. 7) remarked that 20 accepted specific names are junior primary homonyms of unused Megerle names and that others may well be junior synonyms of catalogue names; to review the latter category individually is not feasible, and to do so for the former would be without obvious benefit to stability of nomenclature.

The conservation of *Doryphora* and *Centrotus*, the two generic names mentioned in the application and in Dr Thompson's comment, was not Dr Kerzhner's primary purpose. Under '*Doriphora* Ill.' Megerle (1805, p. [8]; see para. 7 of the application) listed three nominal species, none of them being among the eight included in *Doryphora* Illiger, 1807. The type species of *Doryphora* is *Chrysomela punctatissima* Olivier, 1790 by the designation of Latreille (1810). The '*Centrotus* F.' of Megerle (1802b, p. [14]) would have *Membracis clavata* Fabricius, 1787 (now placed in *Cyphonia* Laporte, 1832) as the type by monotypy, whereas the type species of the

accepted *Centrotus* Fabricius, 1803 is *Cicada cornuta* Linnaeus, 1758 by the designation of Curtis (1830).

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

alboguttata, Saperda, Megerle, [1803]. *Appendix ad catalogum insectorum, quae mense Novembris MDCCCII Viennae Austriae auctionis lege vendita fuere*, p. [10].

variegata, Hippobosca, Megerle, [1805]. *Appendix ad catalogum insectorum, quae mense Novembris MDCCCII Viennae Austriae auctionis lege vendita fuere*, p. [17].

The following are the original references to the works, all with the authorship [J.C. Megerle], placed on an Official Index by the ruling given in the present Opinion:

[1801]. *Catalogus insectorum, quae Viennae Austriae die XIV et sequentibus Decembris MDCCCI auctionis lege distrahuntur.*

[1802a]. *Appendix ad catalogum insectorum, quae mense Decembris MDCCCI Viennae Austriae auctioni lege vendita fuere.*

[1802b]. *Catalogus insectorum, quae Viennae Austriae die IX et sequentibus Novembris MDCCCII auctionis lege distrahuntur.*

[1803a]. *Appendix ad catalogum insectorum, quae mense Novembris MDCCCII Viennae Austriae auctionis lege vendita fuere.*

[1803b]. *Catalogus insectorum, quae Viennae Austriae die 28 Novembris 1803 auctionis lege distrahuntur.*

[1804a]. *Appendix ad catalogum insectorum, quae mense Novembris MDCCCIII auctionis lege vendita fuere.*

[1804b]. *Catalogus duarum collectionem Eleuteratorum die XIV Maji MDCCCIV Viennae Austriae auctione lege vendendarum.*

[1804c]. *Catalogus insectorum, quae Viennae Austriae die XX et sequentibus Septembris MDCCCIV auctionis lege distrahuntur.*

[1804d]. *Appendix ad catalogum insectorum, quae mense Septembris MDCCCIV Viennae Austriae auctionis lege vendita fuere.*

[1805a]. *Catalogus insectorum, quae Viennae Austriae die* [day not indicated] *Junii MDCCCV auctionis lege distrahuntur.*

[1805b]. *Appendix ad catalogum insectorum, quae mense Junii MDCCCV Viennae Austriae auctionis lege vendita fuere.*

OPINION 1711

Chrysops atlanticus Pechuman, 1949 (Insecta, Diptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *canifrons* Walker, 1848, as published in the binomen *Chrysops canifrons*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *atlanticus* Pechuman, 1949, as published in the binomen *Chrysops atlantica*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *canifrons* Walker, 1848, as published in the binomen *Chrysops canifrons* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2761

An application for the conservation of the specific name of *Chrysops atlanticus* Pechuman, 1949 was received from Mr J.E. Chainey (*The Natural History Museum, London, U.K.*) on 22 February 1990. After correspondence the case was published in BZN **48**: 225–226 (September 1991). Notice of the case was sent to appropriate journals.

A comment from Dr Axel O. Bachmann (*Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina*) received during the voting period noted: 'It is clear that the name *Chrysops atlanticus* Pechuman, 1949, for an economically important, well known tabanid fly, is by far the one most used, not only by systematic entomologists but also by those mainly interested in sanitary problems, both of human and veterinary concern. Therefore I agree with the proposal to conserve this name and to suppress the older but unused *C. canifrons* Walker, 1848'.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 225. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 21: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Kraus, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 7: Bouchet, Cogger, Holthuis, Kabata, Lehtinen, Macpherson and Mahnert.

No vote was received from Heppell.

Cogger commented that he would have voted in favour if a lectotype had been designated for *Chrysops atlanticus* (cf. para. 3 of the application).

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

atlanticus, *Chrysops*, Pechuman, 1949, *Canadian Entomologist*, **81**: 79 (as *atlantica*).

canifrons, *Chrysops*, Walker, 1848, *List of the specimens of dipterous insects in the collection of the British Museum*, part 1, p. 197.

OPINION 1712

Drosophila hydei Sturtevant, 1921 (Insecta, Diptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *marmoria* Hutton, 1901, as published in the binomen *Drosophila marmoria*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *hydei* Sturtevant, 1921, as published in the binomen *Drosophila hydei*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *marmoria* Hutton, 1901, as published in the binomen *Drosophila marmoria* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2767

An application for the conservation of the specific name of *Drosophila hydei* Sturtevant, 1921 was received from Drs C.R. Vilela (*Universidade de São Paulo, Instituto de Biociências, São Paulo, Brazil*) and G. Bächli (*Zoologisches Museum, Universität Zürich-Irchel, Zürich, Switzerland*) on 27 March 1990. After correspondence the case was published in BZN **48**: 222–224 (September 1991). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 223. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes – 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Kabata.

No vote was received from Heppell.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

hydei, *Drosophila*, Sturtevant, 1921, *Carnegie Institution of Washington Publications*, **301**: 101.

marmoria, *Drosophila*, Hutton, 1901, *Transactions and Proceedings of the New Zealand Institute*, **33**: 91.

OPINION 1713

Some bee family-group names (Insecta, Hymenoptera): names based on *Colletes* Latreille, 1802, on *Paracolletes* Smith, 1853, on *Halictus* Latreille, 1804, on *Anthidium* Fabricius, 1804 and on *Anthophora* Latreille, 1803 given precedence over some senior names

Ruling

(1) Under the plenary powers:

(a) family-group names based on *Colletes* Latreille, 1802 are hereby given precedence over those based on *Prosopis* Fabricius, 1804 or *Hylaeus* Fabricius, 1793;

(b) family-group names based on *Paracolletes* Smith, 1853 are hereby given precedence over those based on *Neopasiphae* Perkins, 1912;

(c) family-group names based on *Halictus* Latreille, 1804 are hereby given precedence over those based on *Rophites* Spinola, 1808 or *Sphecodes* Latreille, 1804;

(d) family-group names based on *Anthidium* Fabricius, 1804 are hereby given precedence over those based on *Stelis* Panzer, 1806;

(e) family-group names based on *Anthophora* Latreille, 1803 are hereby given precedence over those based on *Eucera* Scopoli, 1770, *Xylocopa* Latreille, 1802, *Ceratina* Latreille, 1802 or *Nomada* Scopoli, 1770.

(2) The entry on the Official List of Family-Group Names in Zoology for XYLOCOPIDAE is hereby amended to record the authorship of Latreille, 1802 and the ruling in (1)(e) above that it and other family-group names based on *Xylocopa* Latreille, 1802 are not to be given priority over those based on *Anthophora* Latreille, 1803.

(3) The entry on the Official List of Family-Group Names in Zoology for CERATINIDAE Latreille, 1802 is hereby amended to record the ruling in (1)(e) above that it and other family-group names based on *Ceratina* Latreille, 1802 are not to be given priority over those based on *Anthophora* Latreille, 1803.

(4) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Prosopis* Fabricius, 1804 (gender: feminine), type species by designation by Morice & Durrant (1915) *Mellinus bipunctatus* Fabricius, 1798;

(b) *Hylaeus* Fabricius, 1793 (gender: masculine), type species by designation by Latreille (1810) *Apis annulata* Linnaeus, 1758;

(c) *Colletes* Latreille, 1802 (gender: masculine), type species by monotypy *Apis succincta* Linnaeus, 1758;

(d) *Neopasiphae* Perkins, 1912 (gender: feminine), type species by monotypy *Neopasiphae mirabilis* Perkins, 1912;

(e) *Paracolletes* Smith, 1853 (gender: masculine), type species by monotypy *Paracolletes crassipes* Smith, 1853;

(f) *Rophites* Spinola, 1808 (gender: masculine), type species by monotypy *Rophites quinquespinosus* Spinola, 1808;

(g) *Sphecodes* Latreille, 1804 (gender: masculine), type species by monotypy *Sphex gibba* Linnaeus, 1758;

(h) *Halictus* Latreille, 1804 (gender: masculine), type species by designation by Richards (1935) *Apis quadricincta* Fabricius, [1777];

(i) *Stelis* Panzer, 1806 (gender: feminine), type species by monotypy *Apis aterrima* Panzer, 1798 (a junior homonym of *Apis aterrima* Christ, 1791 and a subjective synonym of *Apis punctulatissima* Kirby, 1802);

(j) *Anthidium* Fabricius, 1804 (gender: neuter), type species by designation by Latreille (1810) *Apis manicata* Linnaeus, 1758;

(k) *Eucera* Scopoli, 1770 (gender: feminine), type species by designation by Latreille (1810) *Apis longicornis* Linnaeus, 1758;

(l) *Nomada* Scopoli, 1770 (gender: feminine), type species by designation by Curtis (1832) *Apis ruficornis* Linnaeus, 1758.

(5) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *bipunctatus* Fabricius, 1798, as published in the binomen *Mellinus bipunctatus* (specific name of the type species of *Prosopis* Fabricius, 1804);

(b) *annulata* Linnaeus, 1758, as published in the binomen *Apis annulata* (specific name of the type species of *Hylaeus* Fabricius, 1793);

(c) *succincta* Linnaeus, 1758, as published in the binomen *Apis succincta* (specific name of the type species of *Colletes* Latreille, 1802);

(d) *mirabilis* Perkins, 1912, as published in the binomen *Neopasiphae mirabilis* (specific name of the type species of *Neopasiphae* Perkins, 1912);

(e) *crassipes* Smith, 1853, as published in the binomen *Paracolletes crassipes* (specific name of the type species of *Paracolletes* Smith, 1853);

(f) *quinquespinosus* Spinola, 1808, as published in the binomen *Rophites quinquespinosa* (specific name of the type species of *Rophites* Spinola, 1808);

(g) *gibba* Linnaeus, 1758, as published in the binomen *Sphex gibba* (specific name of the type species of *Sphecodes* Latreille, 1810);

(h) *quadricincta* Fabricius, [1777], as published in the binomen *Apis quadricincta* (specific name of the type species of *Halictus* Latreille,1804);

(i) *punctulatissima* Kirby, 1802, as published in the binomen *Apis punctulatissima* (valid subjective synonym of the specific name of *Apis aterrima* Panzer, 1798, the type species of *Stelis* Panzer, 1806);

(j) *manicata* Linnaeus, 1758, as published in the binomen *Apis manicata* (specific name of the type species of *Anthidium* Fabricius, 1804);

(k) *longicornis* Linnaeus, 1758, as published in the binomen *Apis longicornis* (specific name of the type species of *Eucera* Scopoli, 1770);

(l) *ruficornis* Linnaeus, 1758, as published in the binomen *Apis ruficornis* (specific name of the type species of *Nomada* Scopoli, 1770).

(6) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) COLLETIDAE Lepeletier, 1841 (type genus *Colletes* Latreille, 1802), with the endorsement that it and other family-group names based on *Colletes* are to be given precedence over those based on *Prosopis* Fabricius, 1804 or *Hylaeus* Fabricius, 1793;

(b) PROSOPIDIDAE Fallén, 1813 (type genus *Prosopis* Fabricius, 1804), with the endorsement that it and other family-group names based on *Prosopis* are not to be given priority over those based on *Colletes* Latreille, 1802;

(c) HYLAEIDAE Viereck, 1916 (1813) (type genus *Hylaeus* Fabricius, 1793), with the endorsement that it and other family-group names based on *Hylaeus* are not to be given priority over those based on *Colletes* Latreille, 1802;

(d) PARACOLLETIDAE Cockerell, 1934 (type genus *Paracolletes* Smith, 1853), with the endorsement that it and other family-group names based on *Paracolletes* are to be given precedence over those based on *Neopasiphae* Perkins, 1912;

(e) NEOPASIPHAEIDAE Cockerell, 1930 (type genus *Neopasiphae* Perkins, 1912), with the endorsement that it and other family-group names based on *Neopasiphae* are not to be given priority over those based on *Paracolletes* Smith, 1853;

(f) HALICTIDAE Thomson, 1869 (type genus *Halictus* Latreille, 1804), with the endorsement that it and other family-group names based on *Halictus* are to be given precedence over those based on *Rophites* Spinola, 1808 or *Sphecodes* Latreille, 1804;

(g) ROPHITIDAE Schenck, 1866 (type genus *Rophites* Spinola, 1808), with the endorsement that it and other family-group names based on *Rophites* are not to be given priority over those based on *Halictus* Latreille, 1804;

(h) SPHECODIDAE Schenck, [1869] (type genus *Sphecodes* Latreille, 1804), with the endorsement that it and other family-group names based on *Sphecodes* are not to be given priority over those based on *Halictus* Latreille, 1804;

(i) ANTHIDIIDAE Ashmead, 1899 (type genus *Anthidium* Fabricius, 1804), with the endorsement that it and other family-group names based on *Anthidium* are to be given precedence over those based on *Stelis* Panzer, 1806;

(j) STELIDIDAE Schenck, 1860 (type genus *Stelis* Panzer, 1806), with the endorsement that it and other family-group names based on *Stelis* are not to be given priority over those based on *Anthidium* Fabricius, 1804;

(k) ANTHOPHORIDAE Dahlbom, 1835 (type genus *Anthophora* Latreille, 1803), with the endorsement that it and other family-group names based on *Anthophora* are to be given precedence over those based on *Eucera* Scopoli, 1770, *Xylocopa* Latreille, 1802, *Ceratina* Latreille, 1802 or *Nomada* Scopoli, 1770.

(l) EUCERIDAE Latreille, 1802 (type genus *Eucera* Scopoli, 1770), with the endorsement that it and other family-group names based on *Eucera* are not to be given precedence over those based on *Anthophora* Latreille, 1803;

(m) NOMADIDAE Fallén, 1813 (type genus *Nomada* Scopoli, 1770), with the endorsement that it and other family-group names based on *Nomada* are not to be given priority over those based on *Anthophora* Latreille, 1803.

History of Case 2535

An application to conserve the usage of some bee family-group names by giving them precedence over senior but little used names was received from Prof Charles D. Michener (*Snow Entomological Museum, University of Kansas, Lawrence, Kansas, U.S.A.*) on 15 October 1985. After correspondence the case was published in BZN **48**: 227–235 (September 1991). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Cocks, Cogger, Corliss, Hahn, Halvorsen, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Bouchet and Dupuis.

Holthuis abstained.

No vote was received from Heppell.

Holthuis abstained because he considered that the five family-group names given precedence, which were independent of one another, should have been voted on separately. (*Editorial note*. This would have been done had opposition to any of the proposals been received).

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

annulata, *Apis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 578.

ANTHIDIIDAE Ashmead, 1899, *Transactions of the American Entomological Society*, **26**: 72.

Anthidium Fabricius, 1804, *Systema Piezatorum*, p. 364.

ANTHOPHORIDAE Dahlbom, 1835, *Clavis novi hymenopterorum systematis . . .*, p. 5.

bipunctatus, *Mellinus*, Fabricius, 1798, *Entomologia systematica emendata et aucta . . ., Supplementum*, p. 265.

Colletes Latreille, 1802, *Histoire naturelle des fourmis*, p. 423.

COLLETIDAE Lepeletier de Saint Fargeau, 1841, *Histoire naturelle des insectes, Hyménoptères*, vol. 2, p. 295.

crassipes, *Paracolletes*, Smith, 1853, *Catologue of hymenopterous insects in the collection of the British Museum*, part 1, p. 6.

Eucera Scopoli, 1770, *Annus IV, historico-naturalis*, p. 8.

EUCERIDAE Latreille, 1802, *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 3, p. 376.

gibba, *Sphex*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 571.

HALICTIDAE Thomson, 1869, *Opuscula Entomologica*, fasc. 1, p. 8.

Halictus Latreille, 1804, Tableau méthodique des insectes. Pp. 129–200 *in*: *Nouveau Dictionnaire d'Histoire Naturelle*, vol. 24 (Caractères et Tables), p. 182.

HYLAEIDAE Viereck, 1916, *Connecticut State Geological and Natural History Survey Bulletin*, **22**: 737.

Hylaeus Fabricius, 1793, *Entomologia systematica emendata et aucta . . .*, vol. 2, p. 302.

longicornis, *Apis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 574.

manicata, *Apis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 577.

mirabilis, *Neopasiphae*, Perkins, 1912, *Annals and Magazine of Natural History*, (8)**9**: 115.

Neopasiphae Perkins, 1912, *Annals and Magazine of Natural History*, (8)**9**: 114.

NEOPASIPHAEIDAE Cockerell, 1930, *Australian Zoologist*, **6**(2): 148.

Nomada Scopoli, 1770, *Annus IV, historico-naturalis*, p. 44.

NOMADIDAE Fallén, 1813, *Specimen novam Hymenoptera disponendi methodum exhibens*, p. 31.

Paracolletes Smith, 1853, *Catologue of hymenopterous insects in the collection of the British Museum*, part 1, p. 6.

PARACOLLETIDAE Cockerell, 1934, *Australian Zoologist*, **8**(1): 6.

PROSOPIDIDAE Fallén, 1813, *Specimen novam Hymenoptera disponendi methodum exhibens*, p. 32.

Prosopis Fabricius, 1804, *Systema Piezatorum*, p. 293.

punctulatissima, *Apis*, Kirby, 1802, *Monographia Apum Angliae . . .*, vol. 2, p. 231.

quadricincta, *Apis*, Fabricius, [1777], *Genera insectorum . . .*, p. 247.

quinquespinosus, *Rophites*, Spinola, 1808, *Insectorum Liguriae species novae aut rariores*, vol. 2, p. 72.

Rophites Spinola, 1808, *Insectorum Liguriae species novae aut rariores*, vol. 2, p. 8.
ROPHITIDAE Schenck, 1866, *Berliner Entomologische Zeitschrift*, **10**: 322.
ruficornis, *Apis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 578.
Sphecodes Latreille, 1804, Tableau méthodique des insectes. Pp. 129–200 *in*: *Nouveau Dictionnaire d'Histoire Naturelle*, vol. 24 (Caractères et Tables), p. 182.
SPHECODIDAE Schenck, [1869], *Beschreiben der nassauischen Bienen, zweiter Nachtrag . . .*, p. 316.
STELIDIDAE Schenck, 1860, *Stettiner Entomologische Zeitung*, **21**: 141.
Stelis Panzer, 1806, *Kritische Revision der Insektenfaune Deutschlands . . .*, vol. 2, p. 246.
succincta, *Apis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 576.
XYLOCOPIDAE Latreille, 1802, *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 3, p. 379.

The following are the references for the designation of type species of the nominal genera shown:

Anthidium Fabricius, 1804: **Latreille, P.A.** 1810. *Considerations générales sur . . . les classes des crustacés, des arachnides et des insectes . . .*, p. 439.
Eucera Scopoli, 1770: **Latreille, P.A.** 1810. *Considerations générales sur . . . les classes des crustacés, des arachnides et des insectes . . .*, p. 439.
Halictus Latreille, 1804: **Richards, O.W.** 1935. *Transactions of the Royal Entomological Society of London*, **83**: 170.
Hylaeus Fabricius, 1793: **Latreille, P.A.** 1810. *Considerations générales sur . . . les classes des crustacés, des arachnides et des insectes . . .*, p. 438.
Nomada Scopoli, 1770: **Curtis, J.** 1832. *British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland . . .*, vol. 9, pl. 419, text.
Prosopis Fabricius, 1804: **Morice, F.D. & Durrant, J.H.** 1915. *Transactions of the Entomological Society of London*, **1914**: 416–418 [under Articles 67f and 69a(v) of the Code].

OPINION 1714

Streptograptus Yin, 1937 (Graptolithina): *Graptolithus plumosus* Baily, 1871 designated as the type species

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Streptograptus* Yin, 1937 are hereby set aside and *Graptolithus plumosus* Baily, 1871 is designated as the type species.

(2) The name *Streptograptus* Yin, 1937 (gender: masculine), type species by designation under the plenary powers in (1) above *Graptolithus plumosus* Baily, 1871, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *plumosus* Baily, 1871, as published in the binomen *Graptolithus plumosus* and as defined by the neotype (specimen no. BELUM: K12274d in the Ulster Museum, Belfast, Northern Ireland, U.K.) designated by Loydell (1990) (specific name of the type species of *Streptograptus* Yin, 1937), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2697

An application for the designation of *Graptolithus plumosus* Baily, 1871 as the type species of *Streptograptus* Yin, 1937 was received from Drs D.K. Loydell (*Institute of Earth Studies, University College of Wales, Aberystwyth, Wales, U.K.*) and Chen Xu (*Nanjing Institute of Geology and Palaeontology, Academia Sinica, Nanjing, China*) on 4 December 1990. After correspondence the case was published in BZN **48**: 236–237 (September 1991). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 237. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Dupuis.

No vote was received from Heppell.

Dupuis voted against because of the ambiguity in the citation of the specimen number in the neotype designation (para. 1 of the application).

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

plumosus, *Graptolithus*, Baily, 1871, *in* Traill, W.A. & Egan, F.W., *Explanatory memoir to accompany Sheets 49, 50 and part of 61 of the maps of the Geological Survey of Ireland . . .*, p. 22.

Streptograptus Yin, 1937, *Bulletin of the Geological Society of China*, **16**: 297.

The following is the reference for the designation of the neotype of *Graptolithus plumosus* Baily, 1871:

Loydell, D.K. 1990. *Palaeontology*, **33**: 938 (specimen number misprinted as K12275a but given correctly as K12274d in the captions to pl. 1, fig. 4 and p. 940, text-fig. 1; see BZN **48**: 236).

OPINION 1715

HOMALOPTERIDAE Bleeker, 1859 (Osteichthyes, Cypriniformes): not given precedence over BALITORIDAE Swainson, 1839

Ruling

(1) The name *Balitora* Gray, 1830 (gender: feminine), type species by subsequent designation by Jordan (1919) *Balitora brucei* Gray, 1830, is hereby placed on the Official List of Generic Names in Zoology.

(2) The name *brucei* Gray, 1830, as published in the binomen *Balitora brucei* and as defined by the neotype designated by Kottelat (1988) (specific name of the type species of *Balitora* Gray, 1830), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name BALITORIDAE Swainson, 1839 (type genus *Balitora* Gray, 1830) is hereby placed on the Official List of Family-Group Names in Zoology.

History of Case 2703

An application for the conservation of usage of the family-group name HOMALOPTERIDAE Bleeker, 1859 by giving it precedence over BALITORIDAE Swainson, 1839 was received from Herr Harro Hieronimus (*Solingen, Germany*) on 13 January 1989. After correspondence the case was published in BZN **47**: 277–279 (December 1990). Notice of the case was sent to appropriate journals.

An opposing comment from Drs Peter K.L. Ng & Kelvin K.P. Lim (*National University of Singapore, Singapore*) was published in BZN **48**: 148–150 (June 1991). A reply from the author of the application was published in BZN **48**: 253 (September 1991). Further opposing comments from Dr Maurice Kottelat (*Zoologische Staatssammlung, München, Germany*) and Prof J.S. Nelson (*University of Alberta, Edmonton, Canada*) were published in BZN **48**: 333–335 (December 1991).

In relation to the relative usages of the names HOMALOPTERIDAE and BALITORIDAE in *Zoological Record*, cited by Drs Ng & Lim (BZN **48**: 149), a comment from Mrs M. Joan Thorne (*Biosis U.K., York, U.K.*), published in BZN **49**: 144 (June 1992), pointed out that the names used in headings in the *Record* were standardized and were not necessarily those used by authors.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **47**: 278. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 4: Bock, Mahnert, Savage, Starobogatov

Negative votes — 24: Bayer, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Martins de Souza, Minelli, Nielsen, Nye, Ride, Schuster, Štys, Thompson, Trjapitzin, Uéno and Willink.

No vote was received from Heppell.

Cocks commented that since views on the usage of the names BALITORIDAE and HOMALOPTERIDAE were divided priority should apply. Hahn noted that in voting

against he was following all those who had commented on the case. Thompson commented that insufficient documentation of usage of the name HOMALOPTERIDAE had been given to justify use of the plenary powers.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Balitora Gray, 1830, *Illustrations of Indian zoology, chiefly selected from the collection of General Hardwicke*, vol. 1, part 3, pl. 88.

BALITORIDAE Swainson, 1839, *in* Lardner, D. (Ed.), *The cabinet cyclopedia*, vol. 2, p. 190.

brucei, *Balitora*, Gray, 1830, *Illustrations of Indian zoology, chiefly selected from the collection of General Hardwicke*, vol. 1, part 3, pl. 88.

The following is the reference for the designation of *Balitora brucei* Gray, 1830 as the type species of the nominal genus *Balitora* Gray, 1830:

Jordan, D.S. 1919. *The genera of fishes. Part 2. From Agassiz to Bleeker, 1833–1858, twenty-six years, with the accepted type of each*, p. 178.

The following is the reference for the designation of the neotype of *Balitora brucei* Gray, 1830:

Kottelat, M. 1988. *Revue Suisse de Zoologie*, **95**(2): 491–492.

OPINION 1716

Hyla chrysoscelis Cope, 1880 (Amphibia, Anura): specific name conserved by the designation of a neotype

Ruling

(1) Under the plenary powers all previous fixations of type specimen for the nominal species *Hyla chrysoscelis* Cope, 1880 are hereby set aside and specimen no. 37293 in the Texas Natural History Collection (University of Texas at Austin) is hereby designated as the neotype.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology:

(a) *chrysoscelis* Cope, 1880, as published in the trinomen *Hyla femoralis chrysoscelis* and as defined by the neotype designated in (1) above;

(b) *versicolor* Le Conte, 1825, as published in the binomen *Hyla versicolor* and as defined by the neotype (specimen no. 84483 in the American Museum of Natural History, New York, of which the tetraploid karyotype is no. AMNH K207) designated by Smith, Fitzgerald & Guillette (1992).

History of Case 2366

An application to set aside the tetraploid holotype of *Hyla chrysoscelis* Cope, 1880 and to designate a diploid neotype was received from Profs Hobart M. Smith, Kevin T. Fitzgerald and Louis J. Guillette (then of the *University of Colorado, Boulder, Colorado, U.S.A.*) on 18 November 1980. After correspondence the case was published in BZN **40**: 165 166 (October 1983). Notice of the case was sent to appropriate journals.

The subsequent history of the case was summarized by the applicants in BZN **49**: 151 153 (June 1992). As stated in paras. 2 and 3 on p. 152, in March 1990 the Commission rejected the proposed authorship of Johnson (1961) for the name *Hyla chrysoscelis*, endorsed a previous vote (September 1985) which set aside the type status of the holotype of *H. chrysoscelis* Cope, 1880 (unfortunately a specimen of *H. versicolor* Le Conte, 1825), and accepted as neotype of *chrysoscelis* the holotype of *H. versicolor sandersi* Smith & Brown, 1947. However, the ploidy of this specimen (USNM 123978) was questioned. It proved technically not possible to determine the chromosome number, in effect rendering the specimen useless as the neotype. Accordingly, no Opinion was published at that stage.

After unavoidable delays a diploid specimen was proposed (BZN **49**: 152, paras. 3 and 4) as neotype of *H. chrysoscelis* Cope, 1880. A neotype for the tetraploid *H. versicolor* Le Conte, 1825 was also designated; in March 1990 the Commission had voted to place the name of this species on the Official List. The proposal to accept the change of neotype for *H. chrysoscelis* was submitted for voting in September 1992 and the Commission's approval has allowed the completion of this long-running case.

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to confirm the 1990 vote and accept the neotype for *Hyla chryoscelis* proposed on BZN **49**: 152. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Dupuis.

No vote was received from Heppell.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

chrysoscelis, *Hyla femoralis*, Cope, 1880, *Bulletin of the United States National Museum*, **17**: 29.

versicolor, *Hyla*, Le Conte, 1825, *Annals of the Lyceum of Natural History of New York*, **1**: 281.

. The following is the reference for the designation of the neotype of *Hyla versicolor* Le Conte, 1825:

Smith, H.M., Fitzgerald, K.T. & Guillette, L.J., Jr. 1992. BZN **49**: 152.

On BZN **49**: 152 W.E. Duellman was incorrectly printed as 'Duellmann'.

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; the Commission's Secretariat reserves the right to return applications not so prepared.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . .'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in ASCII text in IBM PC format. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

Applicants would be well advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 50, part 1 (published on 25 March 1993). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Chtenopteryx* Appellöf, 1890 (Mollusca, Cephalopoda): proposed confirmation as the correct original spelling. (Case 2874). G. Bello & R. Giannuzzi-Savelli.

(2) *Coluber poecilogyrus* Wied-Neuwied, 1825 (currently *Liophis poecilogyrus*; Reptilia, Serpentes): proposed conservation of the specific name. (Case 2875). H.M. Smith, J.R. Dixon & V. Wallach.

(3) *Cetiosauriscus* von Huene, 1927 (Reptilia, Sauropodomorpha): proposed designation of *C. stewarti* Charig, 1980 as the type species. (Case 2876). A.J. Charig.

(4) *Lycognathophis* Boulenger, 1893 (Reptilia, Serpentes): proposed conservation. (Case 2877). H.M. Smith & V. Wallach.

(5) *Scarabaeus rufus* de Geer, 1778 (currently *Dischista rufa*), *S. rufus* Moll, 1782 (currently *Aphodius rufus*), *S. rufus* Fabricius, 1792 (currently *Aegialia rufa*), and *S. foetidus* Herbst, 1783 (currently *Aphodius foetidus*) (Insecta, Coleoptera): proposed conservation of the specific names. (Case 2878). F.-T. Krell, Z. Stebnicka & E. Holm.

(6) *Aptornis* Owen, 1848 (Aves, 'Gruiformes'): proposed conservation. (Case 2879). E. Weber & F.-T. Krell.

(7) *Polycentrus schomburgkii* Müller & Troschel, 1848 (Osteichthyes, Perciformes): proposed conservation of the specific name. (Case 2880). H.-J. Paepke.

(8) *Myopa* Fabricius, 1775 (Insecta, Diptera): proposed conservation of *Conops buccata* Linnaeus, 1758 as the type species. (Case 2881). S. Camras.

(9) *Lagomeryx* Roger, 1904 (Mammalia, Artiodactyla): proposed designation of *L. ruetimeyeri* Thenius, 1948 as the type species. (Case 2882). A.W. Gentry & E.P.J. Heizmann.

(10) *Procervulus* Gaudry, 1877 (Mammalia, Artiodactyla): proposed designation of *Antilope dichotoma* Gervais, 1849 as the type species. (Case 2883). A.W. Gentry & G. Rössner.

(11) *Xerammobates* Popov, 1951 (Insecta, Hymenoptera): proposed designation of *Ammobates* (*Xerammobates*) *oxianus* Popov, 1951 as the type species. (Case 2884). D.D. Baker.

(d) *Ruling of the Commission.* Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

Call for nominations for new members of the International Commission on Zoological Nomenclature

The following members of the Commission reach the end of their terms of service at the close of the XXV General Assembly of the International Union of Biological Sciences to be held in Paris in September 1994: Dr F.M. Bayer (U.S.A., Corallia); Prof J.O. Corliss (U.S.A., Protista); Prof Dr G. Hahn (Germany, Trilobita); Prof Dr O. Halvorsen (Norway, Parasitology); Dr Ya.I. Starobogatov (Russia, Mollusca); Dr V.A. Trjapitzin (Russia, Hymenoptera).

The addresses and specialist fields of the present members of the Commission may be found in the *Bulletin of Zoological Nomenclature*, **50**(1) (March 1993). Under Article 3b of the Commission's Constitution a member whose term of service has ended is not eligible for immediate re-election unless the Council of the Commission has decided to the contrary.

The Commission invites nominations, by any person or institution, of candidates for membership. Article 2b of the Constitution prescribes that:

> 'The members of the Commission shall be eminent scientists, irrespective of nationality, with a distinguished record in any branch of zoology who are known to have an interest in zoological nomenclature'.

(It should be noted that 'zoology' here includes the applied biological sciences (medicine, agriculture, etc.) which use zoological names).

Nominations made since June 1990 will be reconsidered automatically and need not be repeated. Additional nominations, giving the date of birth, nationality and qualifications (by the criteria mentioned above) of each candidate should be sent by 1 June 1994 to: *The Executive Secretary, International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.*

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature has been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

The Association's President is Dr V. Mahnert (Switzerland), the Vice-President Dr I.M. Kerzhner (Russia), the Secretary Dr E. Macpherson (Spain) and the Treasurer Dr M.A. Alonso-Zarazaga (Spain). Other members of the Inaugural Council are Dr H.M. André (Belgium), Dr J.-P. Hugot (France), Prof. A. Minelli (Italy) and Dr C. Nielsen (Denmark). Membership of the Association is open to all European zoologists; further details can be obtained from Dr M.A. Alonso-Zarazaga, Museo Nacional de Ciencias Naturales, José Gutiérrez Abascal 2, 28006 Madrid, Spain.

The International Code of Zoological Nomenclature

The Third Edition (published 1985) supersedes all earlier versions and incorporates many changes.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £19 or $35, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £15 or $29; payment should accompany orders.

Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895; there are about 9,900 entries.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £60 or $110, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £40 or $75; payment should accompany orders.

In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updatings to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

R. V. Melville
1914–1993

OBITUARY

Mr R.V. MELVILLE

Richard Valentine Melville — palaeontologist, diplomat, classicist, savant, raconteur, and nomenclaturist par excellence — died in London on 13 March 1993.

Born in 1914, he went to school at Wellington College and, as an English Speaking Union scholar, in Providence, Rhode Island, U.S.A. He graduated from Reading University with 1st class honours in Geology and took an M.Sc. by research.

In 1938 he was appointed to the Geological Survey and Museum (now the British Geological Survey), working closely with the field survey staff as palaeontologist and biostratigrapher. He specialised in Mesozoic faunas, particularly the Echinacea, and contributed a number of papers on their classification; these were amplified and extended in the Echinodermata volume of the *Treatise on Invertebrate Paleontology*. He became Chief Palaeontologist in 1965 and Assistant Director (Specialist Services) in 1972; he retired from the Survey in 1974. For almost a century and a half the monographs of the Palaeontographical Society have provided the principal means for the description of British fossils, and Melville served as Secretary and Editor of the Society from 1948 to 1961, during which time many important monographs passed through his hands.

In 1961 he was seconded for four years to the British Embassy in Paris as Scientific Counsellor, where he was responsible for advising the Ambassador and his staff on scientific aspects of foreign policy, for reporting on significant developments in science and for promoting contacts and understanding between scientists in the U.K. and France.

He was seconded in 1971 for 10 months to the Headquarters of the Natural Environment Research Council as Deputy Secretary dealing with scientific matters thoughout the Council.

During his palaeontological career Melville became deeply interested and knowledgeable in zoological nomenclature. His association with the International Commission on Zoological Nomenclature began 40 years ago. He played a prominent part in the 1953 Copenhagen Colloquium and the International Congress of Zoology Section on Nomenclature, assisting the Commission's Secretary, Francis Hemming, to prepare the daily summaries of the proceedings. He verified and saw through to publication the 'Copenhagen Decisions' — described by Hemming as 'that indispensable work of reference to all systematists'. On Hemming's sudden illness in 1958, Melville was seconded from the Geological Survey and Museum for 18 months as Assistant Secretary of the Commission in order to be Secretary of the London Colloquium and Congress Section on Nomenclature. He was also Secretary of the Editorial Committee of the 1st Edition of the *International Code of Zoological Nomenclature*, published in 1961.

Melville was elected to the Commission in 1968 and remained a member until he reached the age limit in 1989. He was the Commission's Secretary from 1968 until retiring in 1985, and played a key role in the preparation of successive editions of the Code, where his near-perfect knowledge of French was of great value. He compiled and edited the *Bulletin of Zoological Nomenclature* and prepared some 500 Opinions giving the Commission's rulings. As many zoologists and others around the world

can testify, he untiringly gave advice on the often complex (and indeed contentious) problems that arise in zoological nomenclature. He was widely regarded both as an expert and as a friend. He had a great ability to simplify issues, and only occasionally did a pointed turn of phrase betray a sense of irritation when correspondents were persistently obtuse or intolerant of others.

Melville was appointed to the International Trust for Zoological Nomenclature in 1966, and served either as Scientific Controller or member until his death. In the early 1980s the Trust's funds were nearly exhausted, and in addition to his other tasks he undertook an Appeal to enable the Commission to continue its work. He succeeded in raising adequate money to maintain the Commission on a sound financial basis throughout that decade.

Writing in *Biology International* at the time of Melville's retirement as Secretary, the Commission's President, Professor W.D.L. Ride, said that 'the zoological community as a whole owes a great debt to Richard Melville for his dedication to zoological nomenclature and the wisdom and skill he has shown in administering the Commission's affairs. His experience and scholarship will be greatly missed'.

Ever a diligent worker, Melville continued to serve the cause he loved so well and was invariably ready to respond to requests for advice. He undertook to write a history of the Commission for its forthcoming centenary and was well advanced in this project at the time of his death. Its publication will form a fitting tribute to a man whose inestimable contribution to zoological nomenclature and hence taxonomy was matched only by his erudition and his humanity.

Case 2823

Acineta Ehrenberg, [1834] and *Tokophrya* Bütschli, 1889 (Ciliophora, Suctoria): proposed conservation; *Acineta tuberosa* Ehrenberg, [1834] and *Podophrya quadripartita* Claparède & Lachmann, 1859 (currently *Tokophrya quadripartita*): proposed conservation of the specific names

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Abstract. The main purpose of this application is the conservation of the specific name of the much studied suctorian *Acineta tuberosa* Ehrenberg, [1834], the type species of *Acineta*. Ehrenberg believed that his species was the same as that in brief descriptions of *Brachionus tuberosus* and *Vorticella tuberosa* by Pallas (1766) and Müller (1786) respectively. This is not the case, and *tuberosus* has not been used in the Pallas or Müller senses in the past 150 years. *B. tuberosus* Pallas may have been a synonym of the widely used name *Tokophrya quadripartita* (Claparède & Lachmann, 1859). The specific name of *Acineta tuberosa* has recently been attributed to Pallas; this would cause much confusion, as would adoption of the nomen dubium *Volverella astoma* Bory de St Vincent, [1827] for *A. tuberosa* or for *T. quadripartita*, the type species of *Tokophrya*.

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1. Pallas (1766) described a number of freshwater 'zoophytes', and on p. 105 named one of them (species 63) as *Brachionus tuberosus*. Pallas based the brief description on illustrations (pl. 13, figs. 10–12) of Baker (1753), who on p. 341 referred to the organism as 'Clustering polypes'. Following Baker's report of his freshwater species, Pallas gave the habitat of *B. tuberosus* as 'stagna Angliae'.

2. Müller (1786, p. 308, pl. 44, figs. 8–9) described and illustrated *Vorticella tuberosa*. Although using the specific name *tuberosa* he was evidently unsure of the identity of his species with that of Baker and Pallas, since he wrote 'Pall. *Zooph.* 63 ?' and 'Baker...t.13. f.10–12 ?'. The species was said to be found in marshes. Baker, Pallas and Müller were probably dealing with species of *Tokophrya* (see para. 10 below).

3. Bory de St Vincent ([1827], p. 781) erected the new genus *Volverella* containing the single nominal species *V. astoma* (p. 782). He synonymized this with the species described by Baker, Pallas and Müller, but gave no reason for replacing the *tuberosus* and *tuberosa* of the latter authors. Neither *Volverella* nor *astoma* have been used as valid names in the past 150 years and they cannot be identified with confidence; we propose their suppression to prevent any threat to the names *Acineta*, *Tokophrya*, *A. tuberosa* and *T. quadripartita* discussed in this application.

4. Ehrenberg ([1834], p. 284) published the diagnosis of a new genus *Acineta* in which he included three nominal species; *A. tuberosa* was briefly described on p. 287. Although this was marine, from the Baltic Sea, Ehrenberg mentioned Müller and considered that *Vorticella tuberosa* and his own *Acineta tuberosa* were the same. However, the descriptions show they were not.

5. Ehrenberg's paper has usually been quoted with the date 1833, the 'Jahr' of the *Abhandlungen*. However, it reports (e.g. on pp. 233, 266) observations made as late as July 1834. The complete volume was published in 1835, but according to a note by C.D. Sherborn in the copy in the Natural History Museum in London Ehrenberg's paper was issued as a separate in 1834.

6. Ehrenberg (1838) described in detail and illustrated the three species he had placed in *Acineta*, with *tuberosa* being on p. 241 and pl. 20, fig. 9. He stated (p. 241) that *Volverella astoma* Bory de St Vincent, [1827] was not the same as his own species, which he still believed to be *Vorticella tuberosa* Müller, 1786.

7. Claparède & Lachmann (1859, p. 388) discussed *A. tuberosa* Ehrenberg, remarking that Ehrenberg's figures were 'bonnes'. In 1861 (p. 116) Claparède & Lachmann stated that their own freshwater species *Podophrya quadripartita* (1859, p. 382) was perhaps the species of Baker, Pallas and Müller (see paras. 1 and 2). They added that Ehrenberg had apparently never seen *P. quadripartita* and that he had applied the name *tuberosa* to his marine species in error. Claparède & Lachmann nevertheless continued to use *Acineta tuberosa* in Ehrenberg's taxonomic sense, as well as *P. quadripartita*, and so have all later authors.

8. Curds (1985a, p. 80) discussed *Acineta tuberosa* Ehrenberg. Despite his acceptance of Ehrenberg's authorship, three of the listed 'synonyms' were earlier: *Brachionus tuberosus* Pallas, 1766, *Vorticella tuberosa* Müller, 1786, and *Volverella astoma* Bory de St Vincent, 1825 (correctly [1827]). Curds made no comment about his citation of these senior names in the synonymy of *A. tuberosa* Ehrenberg.

9. Following the citations of Curds (1985a), Foissner (1988, p. 4) adopted the name and authorship *Acineta tuberosa* (Pallas, 1766). However, as explained above, the *tuberosus* of Pallas (Baker's species of 1753) was certainly not identical with the species always called *Acineta tuberosa* Ehrenberg. The attribution of the name *tuberosa* to Pallas or Müller would be very destabilizing; *tuberosa* in such a taxonomic sense has not been used as a valid name in the past 150 years. The literature on *A. tuberosa* Ehrenberg is very extensive (see for example Collin, 1912; Guilcher, 1951; Batisse, 1967; Bardele & Grell, 1967; Bardele, 1969, 1970; Farmer, 1980; Curds, 1985a, 1985b; Lee, Hutner & Bovee, 1985; Dale & Blom, 1987; Schödel, 1987; Matthes, Guhl & Haider, 1988). *A. tuberosa* is the type species of *Acineta* by the designation of Collin (1912, p. 336). *Acineta* is in turn the type genus of the ACINETIDAE Ehrenberg, 1838 (described on p. 316 and there spelled Acinetinen, but latinized on p. 533).

10. Bütschli (1889, p. 1928) erected the nominal genus *Tokophrya*, mentioning the species described by Baker, Pallas, Müller and Bory de St Vincent (paras. 1–3 above). Among the included species was *Podophrya quadripartita* Claparède & Lachmann, 1859; this has consistently been placed in *Tokophrya* and was designated the type species by Curds (1985c, p. 169). The name *Tokophrya quadripartita* (Claparède & Lachmann, 1859), a possible synonym of Pallas's *Brachionus tuberosus* (see para. 7 above), is very well established (see the references given in the previous para. and

their bibliographies). To replace *quadripartita* by *tuberosus* Pallas or by *astoma* Bory de St Vincent would be extremely confusing as well as being of doubtful accuracy. The generic name *Tokophrya* is in universal use and to replace it (e.g. by *Volverella*) would be very destabilizing.

11. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  (a) the generic name *Volverella* Bory de St Vincent, [1827];
  (b) the following specific names:
    (i) *tuberosus* Pallas, 1766, as published in the binomen *Brachionus tuberosus*;
    (ii) *tuberosa* Müller, 1786, as published in the binomen *Vorticella tuberosa*;
    (iii) *astoma* Bory de St Vincent, [1827], as published in the binomen *Volverella astoma*;

(2) to place on the Official List of Generic Names in Zoology the following names:
  (a) *Acineta* Ehrenberg, [1834] (gender: feminine), type species by subsequent designation by Collin (1912) *Acineta tuberosa* Ehrenberg, [1834];
  (b) *Tokophrya* Bütschli, 1889 (gender: feminine), type species by subsequent designation by Curds (1985) *Podophrya quadripartita* Claparède & Lachmann, 1859;

(3) to place on the Official List of Specific Names in Zoology the following names:
  (a) *tuberosa* Ehrenberg, [1834], as published in the binomen *Acineta tuberosa* (specific name of the type species of *Acineta* Ehrenberg, [1834]);
  (b) *quadripartita* Claparède & Lachmann, 1859, as published in the binomen *Podophrya quadripartita* (specific name of the type species of *Tokophrya* Bütschli, 1889);

(4) to place on the Official Index of Rejected and Invalid Generic names in Zoology the name *Volverella* Bory de St Vincent, [1827], as suppressed in (1)(a) above;

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  (a) *tuberosus* Pallas, 1766, as published in the binomen *Brachionus tuberosus* and as suppressed in (1)(b)(i) above;
  (b) *tuberosa* Müller, 1786, as published in the binomen *Vorticella tuberosa* and as suppressed in (1)(b)(ii) above;
  (c) *astoma* Bory de St Vincent, [1827], as published in the binomen *Volverella astoma* and as suppressed in (1)(b)(iii) above.

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Case 2820

Turbo politus Linnaeus, 1758 (currently _Melanella polita_; Mollusca, Gastropoda): proposed conservation of usage of the specific name, so conserving the specific name of _Buccinum acicula_ Müller, 1774 (currently _Cecilioides acicula_)

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Abstract. The purpose of this application is to conserve the current universal understanding and usage of the specific name of the European prosobranch mollusc *Turbo politus* Linnaeus, 1758 (family EULIMIDAE Philippi, 1853) for which a neotype has been designated. Recently discovered syntypes of *T. politus* are conspecific with *Buccinum acicula* Müller, 1774, the type species of *Cecilioides* Férussac, 1814 (Pulmonata, family FERUSSACIIDAE Bourguignat, 1883). *C. acicula* is found around the Mediterranean and in western Europe, and has been introduced into the eastern U.S.A. and Bermuda. Both the names *Cecilioides* and *B. acicula* have been placed on Official Lists (Opinion 335; March 1955).

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1. Linnaeus (1758, p. 767) described *Turbo politus* from 'M[are] Mediterraneo'. He did not refer here (the 10th edition of his *Systema Naturae*) or later (the 12th edition of 1767) to the existence of a specimen. The name was used by early authors (Pulteney, 1799, p. 49; Montagu, 1808, p. 398; Jeffreys, 1867, pp. 167, 203, and others) for various gastropod species of the family EULIMIDAE Philippi, 1853. Martel (1905, p. 328), followed by Dautzenberg (1927, p. 162), pointed out that authors were confusing different taxa under the name and that *politus* referred exclusively to a small Mediterranean species (see BZN **49**: 113, paras. 4 and 6). Martel noted that Linnaeus's description was brief but clear, and that the stated habitat and size ('Testa Gr[ani] hordei [barley grain] magnitudine') applied only to *politus*. In recent times the species has been placed in *Melanella* Bowdich, 1822, *Eulima* Risso, 1826 or *Balcis* Leach in Gray, 1847. A search by one of us (A.W.) in the Linnean Society collection in London and by Prof A. Holm, former curator at the Zoological Museum of the University of Uppsala, failed to find a Linnaean specimen. Warén (1988, pp. 20, 21, figs. 13, 14) discussed the identity and synonymy of *politus*, and to remove any ambiguity in the use of the name described and figured a specimen (catalogue no. 1071 in the Zoological Museum, Uppsala) from the Golfe de Gabes, Tunisia, which he designated the neotype. Warén also designated (p. 20) the same specimen as the neotype of *Eulima intermedia* Cantraine, 1835 (p. 390), the type species of

Polygireulima Sacco, 1892 (p. 592), and of *Rissoa sinuosa* Scacchi, 1836 (p. 15, figs. 26, 27), thereby rendering the latter two unused and untypified specific names junior objective synonyms of *Turbo politus*.

2. The mollusc material in Linnaeus's collection housed in the Linnean Society, London was listed by Hanley (1855) and by Dance (1967). Hanley (p. 354) noted: 'My earlier set of notes alludes to the presence in the collection of a wretched example of *E[ulima] polita* ... but I have failed in detecting it in a more recent examination'. He erroneously recorded that Linnaeus had denoted a specimen in his possession in 1758, which was not so denoted in 1767. Dance (1966, p. 22) doubted the existence of such a specimen. The study by Dodge (1959) of *Turbo* species described by Linnaeus remained incomplete and did not include *politus*.

3. Notes in a manuscript by Linnaeus intended for a 13th edition of *Systema Naturae*, kept in the Linnean Society, recorded that specimens of *Turbo politus* were procured by Erik Brander, the Swedish Consul in Algiers from 1753–1765, who had instructions to collect natural history objects for Queen Lovisa Ulrika (see Dance, 1967, p. 16). Specimens originating from Brander were exceptional among those sent to Linnaeus in having reliable localities (Dance, 1967, p. 16). Linnaeus relied on the Queen's collection for the descriptions of molluscs in both the 10th (1758) and 12th (1767) editions of his *Systema Naturae* and in 1764 he published a catalogue of the specimens. This was mostly written in 1751–1752 and had been ready for publication since 1754; it was intended that it should be illustrated but the preparation of the plates took too long (see Lovén, 1887, p. 41) and Linnaeus obtained the Queen's permission to publish the catalogue privately. The plates which were produced remain, still unpublished, in the archives of the Swedish Academy of Sciences, Stockholm, where Warén examined them. Neither the catalogue nor the plates mentions *Turbo politus*.

4. Until a few years before he died in 1778 Linnaeus occasionally attended and curated the Queen's collection. On his death the care of the collection passed to Olof Swartz, professor of botany and natural history at the School of Surgeons in Stockholm. He had lists printed with names used in the 12th edition of *Systema Naturae* and these names were then glued on the shells (see Lovén, 1887, p. 47). N.H. Odhner (MS) recorded that the names were 'in many cases even pasted on the wrong subjects'. After the Queen's death duplicate (only?) specimens were sold (see Wallin, 1992, p. 224). Finally, in 1803 the collection was given to the University of Uppsala by King Gustav IV Adolf (see Lönnberg, 1916). Swartz became curator (1808–1818) of the museum of the Royal Academy of Natural Sciences in Stockholm (now the Naturhistoriska Riksmuseet) and there is good reason (Odhner, MS and Wallin, 1992) to assume that specimens were transferred from the Queen's collection in Uppsala to the Academy museum in Stockholm.

5. After the transfer to Uppsala the collection was curated by Prof Carl Peter Thunberg, a student of Linnaeus's, who added his own handwritten labels and catalogued the collection (Thunberg, 1804). *Turbo politus* was not listed in this catalogue. At this time and even after Thunberg's death in 1828, specimens from the Queen's collection were joined to those in Uppsala by donations from collectors who had bought them (see para. 4 above). The printed labels attached by Swartz have been used to identify these secondarily incorporated specimens as original material. The Uppsala collection includes putative types of 637 mollusc species. The Swartz

labels mean that it is safer to assume they are Linnaean specimens than is the case with the material in the Linnean Society in London, which was much contaminated by Linnaeus's son and during the time (1784–1828) that it was owned by J.E. Smith (see Hanley, 1855, pp. 2–3 and Dance, 1967, pp. 3–4).

6. During the recent preparation of a list of Linnaeus's type material in Uppsala (Wallin, 1991), two lots of specimens labelled [*Turbo*] *politus* were found among the pulmonate molluscs. The locality 'M. Mediterraneo (collected by E. Brander and for Queen Lovisa Ulrika)' is given. The shells are glued to two small pieces of the same kind of paper, and neither the shells nor the paper show any sign of having been reattached. One lot (catalogue no. UUZM 1184a-b) is accompanied by a label printed by Swartz (see para. 4 above). The second lot (no. UUZM 1185a-b) has a handwritten label (not prepared by Thunberg; see para. 5 above), glued in the same way and probably pre-Thunberg. There is good reason to believe that these are Linnaeus's hitherto uncatalogued syntypes of *T. politus*. Examination of the specimens, however, has shown that they are conspecific with the pulmonate *Buccinum acicula* Müller, 1774 (p. 150), the type species by monotypy (as '*Bulimus acicula* Brug.', i.e. Bruguière, [1789], p. 311, who referred to Müller) of *Cecilioides* Férussac, 1814 (p. 48; family FERUSSACIIDAE Bourguignat, 1883). Both the names *Cecilioides* and *B. acicula* Müller have been placed on Official Lists (Opinion 335; March 1955).

7. The family EULIMIDAE includes more than 4000 species, worldwide, which are almost all parasitic on echinoderms. The use of the specific name *politus* Linnaeus, 1758 for a Mediterranean eulimid has been stable for a long time. Recent examples of its use include Nordsieck (1982, p. 169), D'Angelo & Gargiullo (1978, p. 118), Sabelli, Giannuzzi-Savelli & Bedulli (1990, pp. 34, 184) and Cossignani, Cossignani, Di Nisio & Passamonti (1992, fig. 129). The host of *politus* remains unknown. *Cecilioides acicula* (Müller, 1774) is a terrestrial species but is frequently found washed ashore after being carried out to sea by flooding streams (see Kerney, Cameron & Jungbluth, 1983, p. 202). It is widely distributed around the Mediterranean. The name *acicula* has been used consistently for the taxon since its introduction (the nomenclatural history was summarized by Kennard & Woodward, 1926, pp. 281–283) and is one of the most well known and universally accepted names among European pulmonates (see, for example, the recent publications of Frömming, 1954, pp. 70–72; Grossu, 1955, pp. 338, 339, fig. 188; Hässlein, 1966, p. 60; Evans, 1972; Pintér, Richnovszky & Szigethy, 1979, pp. 98, 258; Pfleger & Chatfield, 1983, pp. 203, 204; Gittenberger, Backhuys & Ripken, 1984, p. 117; Boato, Bodon & Giusti, 1985, p. 308; Abbott, 1989, p. 84; Robles, 1990, p. 479). Acceptance of the recently discovered syntypes of *politus* would necessitate using *politus* as the valid name for the species now called *acicula*, with *acicula* being a junior subjective synonym. Another name would be required for *politus* as currently understood. These changes would result in considerable and unnecessary confusion in the nomenclature in two separate families. It is thus very desirable that the interpretation of *politus* based on the neotype should be maintained.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type specimen for the nominal species *Turbo politus* Linnaeus, 1758 and to confirm the neotype designation by Warén (1988);

(2) to place on the Official List of Specific Names in Zoology the name *politus* Linnaeus, 1758, as published in the binomen *Turbo politus* and as defined by the neotype designated by Warén (1988), confirmed in (1) above;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the names:

(a) *intermedia* Cantraine, 1835, as published in the binomen *Eulima intermedia* (a junior objective synonym of the specific name of *Turbo politus* Linnaeus, 1758);

(b) *sinuosa* Scacchi, 1836, as published in the binomen *Rissoa sinuosa* (a junior objective synonym of the specific name of *Turbo politus* Linnaeus, 1758).

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Case 2864

Termes lacteus Froggatt, 1898 (currently *Coptotermes lacteus*; Insecta, Isoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Coptotermes lacteus* (Froggatt, 1898), an abundant and well known termite of south-east Australia. Froggatt published the specific name as *lactis* in a 'popular' work the previous year, but following his own rejection of this spelling it has remained unused.

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1. Froggatt (1897, unnumbered plate facing p. 297) illustrated parts of a termite from New South Wales under the name '*Termes lactis*, n. sp.'. On p. 297 he commented that 'in a concluding paper in my Monograph of the Australian Termitidae, being published in the Proceedings of the Linnean Society of N.S.W., I propose to call it the 'Milk Termite' (*Termes lactis*, n. sp.)'. The illustration is an indication under Article 12b(7) of the Code, so that *lactis* is an available name even though no taxonomic description was given.

2. Froggatt (1898, p. 721), in the third and final part of the monograph to which he had referred in 1897, formally described the species as *Termes lacteus*; he cited but evidently rejected his previous spelling. On p. 723 Froggatt mentioned his 1897 work as being a 'popular paper'; however this may be, the alteration of the name is an unjustified emendation and *lacteus* Froggatt, 1898 is therefore a junior objective synonym of *lactis* Froggatt, 1897 (Article 33b(iii) of the Code).

3. Except for entries under the synonymy of *lacteus* in Desneux (1904, p. 34) and Hill (1942, p. 156), the name *lactis* has been ignored or overlooked or, as in Hill (1926, p. 204) and Hill (1932, p. 142) in which Froggatt (1897) was inaccurately cited as the author of the name *lacteus*, has been regarded as being the same as *lacteus*.

4. Desneux (1904, p. 34) placed *T. lacteus* in the subgenus *Coptotermes* Wasmann, 1896; Silvestri (1909, p. 293) treated *Coptotermes* as a full genus and so have subsequent authors.

5. The species has been referred to as *Coptotermes lacteus* in a very wide range of publications, for it is a species that has been studied extensively in terms of its basic biology, the resistance of materials to attack by it, and its relationships as judged from the chemistry of its cuticular hydrocarbons. Major works using *C. lacteus* include Ratcliffe, Gay & Greaves (1952), Gay & Calaby (1970), Hadlington (1987), Watson (1988) and Watson & Gay (1991) (general texts); Hill (1942) and Snyder (1949) (taxonomy); Gay, Greaves, Holdaway & Wetherly (1955, 1957), Gay & Wetherly (1969), Lenz et al. (1987) and Lenz, Watson, Barrett & Runko (1990) (maintenance conditions, resistance of materials and soil barriers); Watson & Sewell

(1981) and Lenz, Barrett & Miller (1988) (castes); and Brown et al. (1990) (cuticular hydrocarbons and taxonomy). These references are representative rather than comprehensive and serve as examples.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *lactis* Froggatt, 1897, as published in the binomen *Termes lactis*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *lacteus* Froggatt, 1898, as published in the binomen *Termes lacteus*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *lactis* Froggatt, 1897, as published in the binomen *Termes lactis* and as suppressed in (1) above.

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Case 2843

Aradus caucasicus Kolenati, 1857 (Insecta, Heteroptera): proposed replacement of syntype by a neotype, so conserving usage of the specific name and that of *A. hieroglyphicus* Sahlberg, 1878

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Abstract. The purpose of this application is to conserve the specific name of the Caucasian flat bug *Aradus caucasicus* Kolenati, 1857 in its current usage. The only known syntype belongs to the Siberian species *A. hieroglyphicus* Sahlberg, 1878. It is proposed that this syntype should be replaced by a neotype representative of the current usage of *A. caucasicus*.

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1. In a paper published in 1857 Kolenati (p. 438) described but did not figure a new species *Aradus caucasicus*. The journal in which he established the name bears the date 1856 on the cover, but that it was not published until the following year is shown by the printed dates of censor permission which are given as 28.II.1857 [Julian style = 12.III.1857] for the journal and 18.III.1857 [Julian style = 30.III.1857] for the separate; the title page of the separate is dated 1857. Kolenati did not state how many specimens he had in the type series. He reported: 'Habitat sub cortice Fagi in Caucaso et Somchetia'. However, it has long been known that Kolenati included in his monograph of Caucasian Heteroptera a number of species that do not occur in the Caucasus; some of them were tropical and others were from Siberia and other regions of Russia (see Horvath, 1884, pp. 111–112; Kiritshenko, 1918, p. 6). In some cases Kolenati gave exact localities in the Caucasus from which they were supposed to have been collected. Apparently Kolenati mixed up specimens he had collected in the Caucasus with material from other regions in the collections of the Zoological Museum (now the Zoological Institute) in St Petersburg where he worked as curator for a year following his Caucasian trip.

2. The only known type specimen of *Aradus caucasicus* is a pinned female in the collection of the Naturhistorisches Museum in Vienna, where it is labelled '(1) Caucaso Kolenati, (2) caucasicus Kol.', the second part being in Fieber's handwriting. It corresponds with Kolenati's short original description and with the redescription of the specimen by Fieber (1861, p. 114). We examined this syntype (see Kanyukova, 1984, p. 13; Kormilev & Froeschner, 1987, p. 40) and showed that it belongs to *Aradus hieroglyphicus* Sahlberg, 1878 (p. 22). This species occurs only from East Kirgisia through Siberia to Japan; records from the European part of Russia are

based on misidentifications (see Kanyukova, 1984, p. 12). The syntype of *Aradus caucasicus* was in point of fact collected by Gebler in Altai as were some other aradids mentioned in Kolenati's paper.

3. Reuter (1884, p. 129) published another redescription of *Aradus caucasicus* based on specimens recorded by Jakovlev (1879, p. 112) from Derbent (East Caucasus); these specimens, although similar to *A. hieroglyphicus*, belonged to a different species. Reuter's concept of *A. caucasicus* has been accepted by all subsequent workers (e.g. Kiritshenko, 1913, pp. 175–179, 1951, p. 297; Kanyukova, 1984, pp. 12–13). *A. caucasicus* sensu Reuter is known from the Crimea and Caucasus (nominotypical subspecies), Iran (subspecies *persicus* Vásárhelyi, 1977) and Middle Asia (subspecies *turkestanicus* Jakovlev, 1894 (p. 138) and subspecies *margianus* Kiritshenko, 1913).

4. Kolossow (1929) wrongly placed *Aradus caucasicus* in synonymy with *A. muricatus* Hummel, 1827, and was followed by others (e.g. Stichel, 1957, p. 20; Usinger & Matsuda, 1959, p. 91; Putshkov, 1974, pp. 117–118). The erroneous synonymy with *A. muricatus* was corrected by Kanyukova (1984, p. 13).

5. Acceptance of the syntype of *Aradus caucasicus* referred to in para. 2 above as the name-bearing type of *A. caucasicus* would have the following results: the well known Siberian species *A. hieroglyphicus* would be called *A. caucasicus*, the species currently known as *A. caucasicus* would be called *A. turkestanicus* Jakovlev, 1894 and its Caucasian subspecies would need a new name.

6. To stabilize the current use of the specific names involved (see Kormilev & Froeschner, 1987, p. 40) we propose that the following specimen be designated as the neotype of *Aradus caucasicus* Kolenati, 1857: Male, pinned, labelled '(1) Derbent (2) 13', from B. Jakovlev's collection deposited in the Zoological Institute, Russian Academy of Sciences, St Petersburg, specimen figured by Kiritshenko (1913, p. 178, fig. 63). This specimen belongs to the series of specimens examined by Reuter (1884).

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Aradus caucasicus* Kolenati, 1857 and designate as neotype the specimen referred to in para. 6;

(2) to place the following names on the Official List of Specific Names in Zoology:
   (a) *caucasicus* Kolenati, 1857, as published in the binomen *Aradus caucasicus* and as defined by the neotype designated in (1) above;
   (b) *hieroglyphicus* Sahlberg, 1878, as published in the binomen *Aradus hieroglyphicus*.

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Case 2829

Notonecta obliqua Gallén in Thunberg, 1787 (Insecta, Heteroptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of the backswimmer species *Notonecta obliqua* Gallén in Thunberg, 1787 by the suppression of the unused senior subjective synonym *Notonecta marginata* Müller, 1776.

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1. Müller (1776, p. 104) briefly described *Notonecta marginata* by stating 'elytris nigris: margine suturaque luteis' (= elytra black, sutural margins yellow). The origin of the material was not specified, but since the book dealt mainly with the fauna of Denmark it can be assumed to have been Danish. The material no longer exists (Horn & Kahle 1936, p. 184), and the identity of *N. marginata* has remained unclear although another of Müller's names, *N. glauca* (1776, pp. 103–104), has generally been used.

2. Gallén (1787, p. 61, footnote) described *Notonecta obliqua* (as *N. obliqva*) but gave no type locality. The original material does not seem to exist any longer (see Hungerford, 1933, p. 53).

3. References to *Notonecta marginata* Müller have been as follows: (1) Gmelin (1790, p. 2119) repeated the original description and listed the distribution as Denmark, also stating in a footnote that this taxon did not necessarily belong to the genus *Notonecta*. (2) Turton (1802, p. 606) translated Gmelin's (1790) text into English as follows: 'Upper-wings black, the edge and suture yellow', thereby considerably changing the original description and omitting the footnote. (3) Reuter (1888, p. 282) listed the species as a possible synonym of *Cymatia coleoptrata* (Fabricius, [1777], p. 298), a corixid which has yellowish longitudinal stripes on the clavus and corium but not along the sutural margins. (4) Kirkaldy (1897, pp. 419–421) treated it as a variety of *N. glauca* Linnaeus, 1758 (p. 439) and as a synonym of *N. furcata* Fabricius, 1794, p. 58. (5) Oshanin (1910, p. 975) likewise treated *marginata* as a variety of *glauca* and a synonym of *furcata*, but two years later (1912, p. 91) qualified the synonymy with a question mark. (6) Esaki (1928, p. 69) listed it under *N. obliqua obliqua* as *glauca* var. *marginata*, referring to Kirkaldy (1897) and stated (p. 75): 'Kirkaldy identified this species, *Notonecta furcata*, auct., with *Notonecta marginata* Müller'. Esaki then repeated Müller's short original description, said that he did not agree with Kirkaldy (1897), incorrectly stated that the description did not agree with *N. obliqua*, and continued by saying that '*N. marginata* is most

probably identical with one of the *Corixa* (sensu lat.) species, as the description covers all the forms which are common in Denmark, and *marginata* was placed by Müller between *Notonecta striata* and *N. minutissima*, both of which are Corixids.' (7) Hungerford (1933, p. 53) repeated and apparently accepted Esaki's (1928) discussion.

4. The descriptions favour Kirkaldy's (1897) view that *N. marginata* Müller is conspecific with *N. furcata* Fabricius, which in turn is a synonym of *N. obliqua*. Although the hemelytral suture of many corixid species is a narrow yellowish line, in the whole of Europe there is no species of CORIXIDAE with black hemelytra. On the other hand, in *Notonecta obliqua* (NOTONECTIDAE) the hemelytra are black, and on both sides of the suturae there are yellow stripes exactly as stated by Müller (1776) for his *N. marginata*, which thus has priority over *N. obliqua*. However, resurrecting this long-unused name would cause considerable confusion since *N. obliqua* is well known in the recent literature (for example, Bernhard, 1985, p. 17; Nieser, 1978, p. 283; Savage, 1989, 15 entries; a further 11 references by 15 authors over the last 45 years are held by the Commission Secretariat).

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *marginata* Müller, 1776, as published in the binomen *Notonecta marginata*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *obliqua* Gallén in Thunberg, 1787, as published in the binomen *Notonecta obliqua*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *marginata* Müller, 1776, as published in the binomen *Notonecta marginata* and as suppressed in (1) above.

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Case 2830

Corisa nigrolineata Fieber, 1848 (currently *Sigara* (*Pseudovermicorixa*) *nigrolineata*; Insecta, Heteroptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of the water-boatman species *Corisa nigrolineata* Fieber, 1848 by the suppression of the unused senior subjective synonyms *Notonecta minutior* Sulzer, 1776 and *N. minuta* Gmelin, 1790.

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1. *Notonecta minutior* Sulzer, 1776 (p. 91, pl. 10, fig. 1) was described from material collected in Switzerland; the original material is lost (Horn & Kahle, 1936, p. 273). Sulzer's comparison to *N. minutissima* Linnaeus, 1758 (p. 439) was misleading as he said that *N. minutior* was smaller, but the drawing in plate 10 shows its length to be about 6 mm which is more than twice as much as in Linnaeus's species. In the description of *N. minutior* the color of the pronotum and the hemelytra (green, with several brown transverse lines and strands) showed that the species belongs to the CORIXIDAE. The only species of matching size with transverse stripes on the hemelytra and occurring commonly in Switzerland is *Corisa nigrolineata* Fieber, 1848 (p. 527), currently known as *Sigara* (*Pseudovermicorixa*) *nigrolineata nigrolineata* (Fieber).

2. Subsequent references to *N. minutior* are: (1) Goeze (1778, p. 169) and (2) Roemer (1789, pp. 14 & 78) who both listed the species but did not add any useful characteristics for identification. (3) Gmelin (1790, p. 2119) who made an unjustified emendation by calling the species *Notonecta minuta*; he repeated the short description and stated that it did not necessarily belong to the genus *Notonecta* (note concerning species number 6–12 under *N. marginata*); Gallén (1787, p. 61) had already used the name *Notonecta minuta* but without author or description, thereby making *N. minuta* Gallén, 1787 a nomen nudum. (4) Schrank (1801, p. 60) placed the species in the genus *Sigara*, and stated that it occurred with *S. striata* and was less than half its size. (5) Turton (1802, p. 605), in a translation of Gmelin (1790), gave the characteristics of *Notonecta minuta* in English and gave its distribution as Europe, but did not translate the note about possible incorrect generic placement. (6) Gistel (1856, p. 256) listed *Sigara minutior* Sulzer from European standing waters. (7) Reuter (1888, p. 283) indicated that the taxon might be a species of *Corisa*.

3. *Notonecta minutior* Sulzer, 1776 and *Notonecta minuta* Gmelin, 1790 have priority over *Corisa nigrolineata* Fieber, 1848. However, to resurrect these long-unused senior synonyms would cause considerable confusion because *Sigara nigrolineata* (Fieber) is well known in the recent literature (for example, Bosmans, 1982, p. 49; Bernhard, 1985, p. 12; Savage, 1989, 11 entries; a further 14 references by 19 authors over the last 39 years are held by the Commission Secretariat).

4. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) *minutior* Sulzer, 1776, as published in the binomen *Notonecta minutior*;
   (b) *minuta* Gmelin, 1790, as published in the binomen *Notonecta minuta*;
(2) to place on the Official List of Specific Names in Zoology the name *nigrolineata* Fieber, 1848, as published in the binomen *Corisa nigrolineata*;
(3) to place the following names on the Official Index of Rejected and Invalid Specific Names in Zoology:
   (a) *minutior* Sulzer, 1776, as published in the binomen *Notonecta minutior* and as suppressed in (1)(a) above;
   (b) *minuta* Gmelin, 1790, as published in the binomen *Notonecta minuta* and as suppressed in (1)(b) above.

Note: *Notonecta minuta* Hungerford, 1926 (p. 14) is a junior primary homonym of *Notonecta minuta* Gmelin, 1790 (p. 2119). This case will be treated elsewhere by J. T. Polhemus.

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Case 2831

Corisa sexlineata Reuter, 1882 (currently *Sigara* (*Tropocorixa*) *sexlineata*; Insecta, Heteroptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of the water-boatman species *Corisa sexlineata* Reuter, 1882, which is threatened by the unused senior subjective synonym *Corisa confluens* Fieber, 1851.

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1. In a preprint bearing the date 1851 Fieber (p. 18) established the name *Corisa confluens* based on one male specimen collected from 'Egyptus' and deposited in the Halle Museum; the specimen no longer exists. In the Halle Museum there is a series of three males and one female under the name '*Cymantia*' *confluens*, but they belong to *Corixa affinis* Leach, 1817. That these specimens were added to the collection after Fieber's time is suggested by the facts that Fieber described only male characters, that *C. affinis* is much larger than *C. confluens*, and that the number of transverse lines on the pronotum of *C. confluens* is seven but in *C. affinis* it is 12 to 14.

2. Reuter (1882, p. 42) described the species *Corisa sexlineata*. Jaczewski (1949, p. 104) later redescribed this species from the male holotype, which was lost while on loan to him (see Jansson, 1987, p. 6). Fieber's description of *Corisa confluens* matches Reuter's species, which is now known as *Sigara* (*Tropocorixa*) *sexlineata*. The synonymy of *C. confluens* Fieber and *C. sexlineata* Reuter is supported by the late 19th century collections of Puton and Marmottan, both preserved in the Muséum National d'Histoire Naturelle, Paris. Puton's collection includes two males and one female of *S. sexlineata* (+ two females of *Sigara lateralis*) and Marmottan's one male of *S. sexlineata* (+ one female of *Sigara* (*Tropocorixa*) sp.), in each case under the name *Corixa confluens*.

3. The name *Sigara* (*Tropocorixa*) *sexlineata* Reuter has been extensively used in recent literature (for example, Jaczewski, 1949, p. 103; Hynes, 1955, p. 47; Linnavuori, 1981, p. 5; a further 13 references by 8 authors over the last 45 years are held by the Commission Secretariat).

4. Subsequent references to Fieber's species are: (1) Reuter (1891, p. 138) reported '*Corixa confluens* Fieb. verisimiliter. Un ♂' from 'Egypte: Aioun Mousa (fontaines de Moise)'. (2) Puton (1892, p. 33) listed '*Corixa confluens* Fieb. Le Caire, Suez'. (3) Horváth (1901, p. 480) listed '*Corixa confluens* FIEB. — Akbès. Cette espèce n'était connue que d'Égypte' [this species not known outside Egypt]. The title of Horváth's article gives the impression that the species listed would be from Asia Minor, although Akbé is in Syria. (4) Oshanin (1910, p. 981) listed *Corixa confluens* and two years later (1912, p. 91) *Arctocorisa confluens* (Fieb.) from Egypt and Asia Minor, evidently on the basis of Horváth's (1901) data. (5) Royer (1914, p. 135) listed

'*Corixa confluens* Fieb. — Aion Mouça' referring to Reuter (1891). The only cases of using Fieber's taxon within the last 50 years are Stichel (1955, p. 99) who listed the species from Egypt referring to the original description (listing also *S. sexlineata* on p. 101), and Jordan (1953, p. 119) who mentioned that *Sigara confluens* (Fieber) occurred in Egypt and Asia Minor. Jordan stated that he gave references only for the main works cited; since he gave no reference for the statement about *S. confluens* it is likely that he used information either from Horváth (1901) or Oshanin (1910, 1912). Since Jordan (1953) and Stichel (1955) listed only distributional data from earlier sources, I do not consider these a violation of Art. 79c of the Code which states that '... a prima facie case that stability is threatened will be made if an assertion that the senior name has not been used as a valid name during the immediately preceding fifty years is not contradicted ...'.

5. *Corisa confluens* Fieber, 1851 has priority over its synonym *Corisa sexlineata* Reuter, 1888. However, to resurrect Fieber's long-unused name would cause considerable confusion because *Sigara* (*Tropocorixa*) *sexlineata* (Reuter) is well known in the recent literature (see para. 3 above).

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *confluens* Fieber, 1851, as published in the binomen *Corisa confluens*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *sexlineata* Reuter, 1882, as published in the binomen *Corisa sexlineata*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *confluens* Fieber, 1851, as published in the binomen *Corisa confluens* and as suppressed in (1) above.

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Case 2777

Dytiscus biguttatus Olivier, 1795 (currently *Agabus biguttatus*; Insecta, Coleoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of the diving water beetle *Dytiscus biguttatus* Olivier, 1795. It is threatened by the unused senior homonym *Dytiscus biguttatus* Gmelin, 1790, which may be a junior synonym of *D. nebulosus* Forster, 1771.

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1. Gmelin (1790, p. 1959) established the name *Dytiscus biguttatus* for an aquatic beetle from 'Europe'. The description given by Gmelin was cited from Zschach (1788, p. 36, no. 796) who did not give any name to the species for which he gave a five line description.

2. Olivier (1795, p. 26, pl. 4, fig. 36) used the same name *Dytiscus biguttatus* for a different species of aquatic beetle from near Fréjus, France. Aubé ([1837], p. 166) transferred this species to the genus *Agabus* Leach, 1817, where it remains classified today.

3. The only reference to *Dytiscus biguttatus* Gmelin is by Zaitzev (1908, p. 121) who attributed the name to Zschach and thought it was probably a junior synonym of *D. nebulosus* Forster, 1771 (p. 56). Zaitzev (1908, p. 121) also noted that *Dytiscus biguttatus* Olivier was a junior homonym and proposed the replacement name *Agabus olivieri*. However, in his later works (e.g. 1953, p. 227), Zaitzev used *A. biguttatus* (Olivier) as a valid name without mentioning his own replacement name. Zimmermann (1920, p. 157) cited *A. olivieri* Zaitzev as a junior synonym of *A. biguttatus* (Olivier).

4. The name *Dytiscus biguttatus* Gmelin has been overlooked or ignored by other authors. The name *D. biguttatus* is attributed only to Olivier in the catalogues of Schönherr (1808, p. 19), Gemminger & Harold (1868, p. 453), Van den Branden (1885, p. 68) and Zimmermann (1920, p. 157) and in the monographs of Aubé (1838, p. 341) and Sharp (1882, p. 499). All modern workers use the name *A. biguttatus* Olivier (for example, Franciscolo, 1979, p. 546; Galewski, 1971, p. 78; Schaeflein & Wewalka, 1982, p. 13; a further 12 references by 15 authors in the last 22 years are held by the Commission Secretariat). To reject *Dytiscus biguttatus* Olivier, 1795 because of its homonymy with the unused *D. biguttatus* Gmelin, 1790 would create instability in the literature and cause considerable confusion.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *biguttatus* Gmelin, 1790, as published in the binomen *Dytiscus biguttatus*, and all uses of the name *Dytiscus*

biguttatus prior to that by Olivier, 1795, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *biguttatus* Olivier, 1795, as published in the binomen *Dytiscus biguttatus*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *biguttatus* Gmelin, 1790, as published in the binomen *Dytiscus biguttatus* and as suppressed in (1) above.

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Case 2869

HEMIDACTYLIINI Hallowell, 1856 (Amphibia, Caudata): proposed conservation

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Abstract. The purpose of this application is to conserve the name HEMIDACTYLIINI Hallowell, 1856 which has been used for nearly 30 years for a tribe of eight genera of salamanders mainly from eastern North America but with a few species from central United States and Canada. The name is threatened by MYCETOGLOSSINI Bonaparte, 1850 which has been used only once (in 1984) and is based on the unused junior objective synonym *Mycetoglossus* Bonaparte, [1839]. It is proposed that MYCETOGLOSSINI be invalidated by the suppression of *Mycetoglossus*.

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1. In 1850 Bonaparte established the family-group name MYCETOGLOSSINI (as 'Mycetoglossina') based upon his own nominal genus *Mycetoglossus* Bonaparte, [1839] (Article 11f(i) of the Code), which he described and proposed as an unnecessary and invalid replacement for *Pseudotriton* Tschudi, 1838 (pp. 94–95; the name was spelt '*Pseudo-Triton*' by Bonaparte). The dates of publication ([1832]–[1841]) of the parts of Bonaparte's earlier work were set out by Salvadori (1888). Neither of Bonaparte's publications was paginated. The family-group name 'Mycetoglossina' was included in the PLETHODONTIDAE and was published as no. 27 in the table 'Classis IV. Amphibia'. The generic name *Mycetoglossus* appeared as no. 13 of the 'generi Salamandrini', an article included within the chapter on *Euproctus platycephalus*. The name *Mycetoglossus* has remained unused whilst its senior objective synonym *Pseudotriton* has continued to be recognized as valid up to the present time.

2. The name HEMIDACTYLIIDAE (published as 'Hemidactylidae'; see para. 6 below) was proposed by Hallowell (1856, p. 11) based on *Hemidactylium* Tschudi, 1838 (p. 94), a genus which has continued to be recognized as valid. The single species *H. scutatum* was included in the genus and the specific name is available (Article 12b(6)) from Tschudi's work. Tschudi's publication was included in the *Mémoires de la Société des Sciences Naturelles de Neuchâtel* in 1840 but was issued as a separate in 1838. Mertens (1967. p. v) accepted Stejneger's (1907, p. 6) date of October 1838 for the first publication of Tschudi's work. Tschudi (pp. 59, 94) referred to a specimen of *scutatum* in the Leiden museum but not to publication of the name in Siebold's *Fauna Japonica*, as he did with other species; he noted (p. 94) '*Hemidactylium*

scutatum Tsch. Syn. *Salamandra scutata* Schlegel. Mus. Lugd.'. However, *Salamandra scutata*, collected from Nashville in Tennessee, was described by Temminck & Schlegel (p. 119) in the *Fauna Japonica*, the amphibian part of which has been dated as either January 1838 (Sherborn & Jentink, 1895, p. 150), or as '1838 ... between May and October, probably ... September' (Stejneger, 1907, p. 543), or as 'after May 1838' (Hoogmoed, 1978, p. 92). Authorship of Temminck & Schlegel, [1838] for *scutata* is adopted here (see also Frost, 1985, pp. 589, 590). Sherborn (1930, p. 5826) credited the specific name to Tschudi (1838). Schlegel (1844, p. 123, pl. 40, figs. 4–6) figured the species and referred to the earlier Temminck & Schlegel publication. The holotype specimen of *scutatum*, on which the description in both Tschudi's and Temminck & Schlegel's publications was based, is no. RMNH 2301 in the Leiden museum (see Hoogmoed, 1978, pp. 103–104).

3. Hallowell reused his family-group name in 1858 (p. 339). Subsequently neither Bonaparte's nor Hallowell's family-group names was adopted as valid at any level until 1966, when Wake, in his monographic review of the classification of the PLETHODONTIDAE, revived Hallowell's name for a tribe, the HEMIDACTYLIINI, to include eight genera, among them both *Hemidactylium* and *Pseudotriton*.

4. Invoking the Principle of Priority, Dubois (1984, pp. 113–114) revived Bonaparte's name, as MYCETOGLOSSINI, in place of Hallowell's HEMIDACTYLIINI, including both *Hemidactylium* and *Pseudotriton* in the tribe. However, the Code (Article 23b) makes it clear that 'The Principle of Priority is to be used to promote stability and is not intended to be used to upset a long-accepted name in its accustomed meaning through the introduction of an unused name that is its senior synonym'. Neither the senior family-group name MYCETOGLOSSINI nor the name of its type genus *Mycetoglossus* has been used since their proposal (except by Bonaparte, 1852, p. 478, as 'Mycetoglossina'). On the contrary, with the exception of Dubois (1984), the family-group name HEMIDACTYLIIDAE (or its nominotypical subordinates) has been used consistently, mostly after 1966, to the present time in the classification of the PLETHODONTIDAE. A non-exhaustive sample of authors includes Wake (1966, p. 50), Rabb (1966, p. 1), Brandon (1967, p. 1; 1970), Bruce (1971, p. 234), Lombard (1977, p. 49), Sweet (1977, p. 2; 1978, p. 105), Potter & Sweet (1981, p. 64), Wake, Roth & Wake (1983, p. 208), Frost (1985, pp. 587 591), Duellman & Trueb (1986, p. 507), Lombard & Wake (1986, p. 533), Roth (1987), Sever (1987, p. 105) and Roth, Nishikawa, Dicke & Wake (1988). The type genus of the family-group, *Hemidactylium* Tschudi, 1838, has a long history as a valid genus up to the present time, and has been cited in hundreds of publications in numerous contexts, both scientific and popular. Its single species, *H. scutatum* (Temminck & Schlegel, [1838]), is on the list of protected species in many of the states in which it occurs. Resurrection of Bonaparte's family-group name MYCETOGLOSSINI would be uselessly disruptive of nomenclatural stability.

5. Fitzinger (1843, p. 19) proposed a family-group name 'Hemidactyli' based on the gecko (lizard) genus *Hemidactylus*. The stem of the generic name is *Hemidactyl-* and the family name should be corrected (Article 35d(i)) to give HEMIDACTYLIDAE. The stem of Hallowell's salamander generic name *Hemidactylium* is *Hemidactyli-*, yielding the spelling HEMIDACTYLIIDAE at the family level. Article 55 makes it clear that these lizard and salamander family-group names are not homonyms, despite their similarity. In any event, the lizard family-group name has not been used since

it was proposed. With the exception of Frost (1985), who used the spelling 'Hemidactylini', authors have used the correct spelling of the salamander family-group name.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the generic name *Mycetoglossus* Bonaparte, [1839] for the purposes of the Principle of Priority but not for those of the Principle of Homonymy, thereby invalidating the family-group name MYCETOGLOSSINI Bonaparte, 1850;

(2) to place on the Official List of Generic Names in Zoology the name *Hemidactylium* Tschudi, 1838 (gender: neuter), type species by monotypy *Salamandra scutata* Temminck & Schlegel, [1838];

(3) to place on the Official List of Specific Names in Zoology the name *scutata* Temminck & Schlegel, [1838], as published in the binomen *Salamandra scutata* (specific name of the type species of *Hemidactylium* Tschudi, 1838);

(4) to place on the Official List of Family-Group Names in Zoology the name HEMIDACTYLIINI Hallowell, 1856 (type genus *Hemidactylium* Tschudi, 1838);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Mycetoglossus* Bonaparte, 1839 (a junior objective synonym of *Pseudotriton* Tschudi, 1838 and suppressed in (1) above);

(6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name MYCETOGLOSSINI Bonaparte, 1850 (invalid because the name of the type genus has been suppressed in (1) above).

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Case 2882

Lagomeryx Roger, 1904 (Mammalia, Artiodactyla): proposed designation of *L. ruetimeyeri* Thenius, 1948 as the type species

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Abstract. The purpose of this application is to conserve the established understanding of the name *Lagomeryx* Roger, 1904 which has been used for nearly 90 years for a genus of Eurasian Miocene cervoids. The present type designation is of a species of uncertain identity which renders *Lagomeryx* either a senior or a junior subjective synonym. It is proposed that *Lagomeryx ruetimeyeri* Thenius, 1948 be designated the type species, thereby also allowing the stable usage of generic names of other Miocene cervoids to be maintained.

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1. By the end of the nineteenth century numbers of cervoid (deer-like) artiodactyls of Miocene age had come to light in the European fossil record. Schlosser (1887, p. 295) recorded that material of '*Palaeomeryx pygmaeus*' (as used in Meyer's manuscript notes and therefore not an available name) included at least three species, two of them represented at Reisensburg, near Günzburg, Germany, which is now regarded as a lower Miocene locality. Cervoid antlers from there had been illustrated but not named by Rütimeyer (1880, pl. 1, figs. 2–7).

2. The specific name of *Dicroceros* [sic; recte *Dicrocerus*] *minimus* Toula, 1884 (p. 395) was founded for some cervoid teeth from Göriach, Austria. Schlosser (1887, p. 296) considered that the larger of the two Reisensburg '*Palaeomeryx pygmaeus*' species could be conspecific with Toula's species.

3. Hofmann (1893, p. 61) replaced *Dicrocerus minimus* Toula by the name *Palaeomeryx meyeri*. This was because, if Toula's species was assignable to *Palaeomeryx* (para. 2 above), it would be a secondary homonym of '*P. minimus*', a name also given in Meyer's manuscript notes and a different species from that at Göriach. Hofmann rejected '*Palaeomeryx pygmaeus*' because this name, as used by Meyer, was composite. These actions did not take account of the unavailability of Meyer's names. Hofmann (1893, pl. 12, figs. 10–15, pl. 13, figs. 1–4, 6) illustrated dental pieces and a distal metacarpal of *P. meyeri*, all housed in the Joanneum, Graz. Schlosser (1916, p. 15, footnote) subsequently asserted that the metacarpal belonged to a different species, *Palaeomeryx furcatus* Hensel, 1859, later to be placed in *Euprox* Stehlin, 1928, although Thenius (1948, p. 221) preferred Hofmann's original attribution. At that time no antlers had been attributed to the species described from Göriach.

4. Roger (1904, p. 18) founded the genus *Lagomeryx* for species of small cervoids with distinctive clusters of terminal prongs on their antlers. He did not designate a type species. He included *Palaeomeryx meyeri* in the genus and placed the Reisensburg antlers (see para. 1) in this species. He also referred two other species to *Lagomeryx*: *Palaeomeryx parvulus* Roger (1898, p. 38) and *P. pumilio* Roger (1898, p. 39). For *P. parvulus* he had originally illustrated a dentition (Roger, 1898, pl. 2, fig. 7) and an antler (pl. 2, fig. 4), but he later (Roger, 1904, p.18) reassigned the antler to *P. pumilio*. Fahlbusch (1977, p. 232) reported that the antler had been destroyed in the Second World War, and he also regarded it as of uncertain species identity within *Lagomeryx*. The only described specimens of *L. pumilio* were a figured lower third molar (Roger, 1898, pl. 2, fig. 5), another lower third molar and some limb bone fragments. The syntypical material of all three originally included species of *Lagomeryx* thus failed to include any specifically attributable antlers.

5. Thenius (1948, p. 221; 1950, p. 244, figs. 7–9) recorded that some Göriach upper teeth (numbered 9572 in the Joanneum, Graz) assigned to *L. meyeri* were found in association with an antler resembling those of *Euprox* sp.; the species could not therefore include antlers like those at Reisensburg (para. 4 above). Thenius noted that Meyer's manuscript name '*Palaeomeryx minimus*' could not be a homonym of *Dicrocerus minimus* Toula and that the latter therefore had priority over *P. meyeri* Hofmann. Because of the morphology of the antler he placed *D. minimus* in *Euprox*. Thenius (1948, p. 221) founded *L. ruetimeyeri* for *Lagomeryx* fossils from sites other than Göriach which had hitherto been placed in *L. meyeri* and designated as holotype the Reisensburg left antler illustrated by Rütimeyer (1880, pl. 1, figs. 2, 3). This antler has an almost complete crown and is housed in the Bayerische Staatssammlungen für Paläontologie und historische Geologie, Munich. At one time Ginsburg (1971, p. 1001) thought that the Göriach antler and teeth studied by Thenius could belong to *Heteroprox larteti* (Filhol, 1891), but now (personal communication, February 1993) he regards the antler as belonging to a female *Dicrocerus elegans* Lartet, 1851, a species which has also been identified at the site.

6. In spite of the doubtful identity of the nominal taxon *Palaeomeryx meyeri* Hofmann, 1893, Vislobokova (1983, p. 24) designated it as the type species of *Lagomeryx*. If the interpretation of *Palaeomeryx meyeri* by Thenius (1948, 1950) or by Ginsburg (1971) is correct, recognition of this type designation would render *Lagomeryx* Roger, 1904 a senior subjective synonym of either *Euprox* or of *Heteroprox*, both founded by Stehlin (1928, p. 255). If Ginsburg's current interpretation should be correct, *Lagomeryx* would be a junior subjective synonym of *Dicrocerus* Lartet, 1851. Any of these outcomes would introduce considerable confusion into the nomenclature of Miocene cervoids. All four names, *Lagomeryx*, *Heteroprox*, *Euprox* and *Dicrocerus*, are currently in use. Their status was discussed by Simpson (1945, pp. 266–268). *Lagomeryx*, based on the Reisensburg antler, is regarded as the most distinctive of the genera. The name has consistently been used to refer to cervoid species having antlers like those of *L. ruetimeyeri* and unlike those of *Heteroprox*, *Euprox* or *Dicrocerus* (see, for example, Schlosser, 1916; Roman & Viret, 1934; Stehlin, 1937; Pilgrim, 1941; Crusafont Pairo, 1952; Rinnert, 1956; Viret, 1961; Young, 1964 and Chow & Shih, 1978).

7. None of the three species originally included in *Lagomeryx* is suitable as the type species: *Palaeomeryx meyeri* is of uncertain identity (paras. 5 and 6 above),

whilst *P. parvulus* and *P. pumilio* were not characterised by specifically identifiable antlers but based on teeth (para. 4), which are less diagnostic. To maintain the current concept and nomenclature of *Lagomeryx* Roger, 1904 we propose that *Lagomeryx ruetimeyeri* Thenius, 1948 be designated the type species. The latter is the best choice for type species because its holotype is an antler which is complete almost to the tip, and which was studied by Roger and placed by him in the first species assigned to the genus. Moreover, it is the first illustrated antler ascribed to *Lagomeryx*. This designation will also safeguard the usage of names for other nominal genera of Miocene cervoids.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Lagomeryx* Roger, 1904 and to designate *Lagomeryx ruetimeyeri* Thenius, 1948 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Lagomeryx* Roger, 1904 (gender: masculine), type species by designation in (1) above *Lagomeryx ruetimeyeri* Thenius, 1948;

(3) to place on the Official List of Specific Names in Zoology the name *ruetimeyeri* Thenius, 1948, as published in the binomen *Lagomeryx ruetimeyeri* (specific name of the type species of *Lagomeryx* Roger, 1904).

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Case 2883

Procervulus Gaudry, 1877 (Mammalia, Artiodactyla): proposed designation of *Antilope dichotoma* Gervais, 1849 as the type species

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Abstract. The purpose of this application is to conserve the current understanding of the name *Procervulus* Gaudry, 1877 which is in established usage for a genus of Miocene cervoids. It is probable that Gaudry misidentified the single species that he included in the genus. It is proposed that *Antilope dichotoma* Gervais, 1849 be designated the type species, thereby also maintaining the usage of other names of distinct Miocene cervoid genera.

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1. The specific name of *Antilope dichotoma* was made available by Gervais (1849, p. 549), who listed it and referred in a footnote to the distally bifurcated antler. Such an antler was subsequently described (vol. 1, p. 78; vol. 2, caption to pl. 23) and illustrated (vol. 3, pl. 23, figs. 4, 4a) by Gervais ([1850]). The latter work was dated 1848–1852 but surveys of currently published literature (Wagner, 1849, p. 3; 1850, p. 9; 1851, p. 9) have clarified the year of publication of its successive parts. The name *dichotoma* has been used consistently since publication for a species of Miocene cervoid or cervid with antlers bifurcated at the tip.

2. The genus *Procervulus* was founded by Gaudry (1877a, p. 88; 1877b, p. 555) for Miocene cervoids or cervids possessing distally forked antlers but no obvious coronet or burr to indicate seasonal shedding. Gaudry's publication as a book was dated 1878 on the title page. However, the 'depôt legal' of the work was made in November 1877 and an entry in the *Bulletin de la Société Géologique de France*, (3)**6**: 151 recorded that Gaudry presented a copy of his work to a meeting of the society on 17 December 1877. The chapter on ruminants from the work also appeared in *La Revue Scientifique de la France et de l'Étranger*, (2)**13**(24): 553–567, dated 15 December 1877. The date 1877 is adopted here for the publication of Gaudry's work. Since it is not feasible to ascribe priority to either publication both are cited for the name *Procervulus*. Three of the four antlers illustrated by Gaudry (1877a, fig. 100; 1877b, fig. 32) had complete pedicels and demonstrated unambiguously the author's concept of the morphology to be found in his new genus. The illustrated antlers agreed morphologically with Gervais's *Antilope dichotoma* but Gaudry (1877a, p. 88; 1877b, p. 557, footnote) used the name *Cervus capreolus aurelianensis* Meyer in Laurillard, 1843 (p. 333) for the single species he placed in *Procervulus*.

C. aurelianensis is thus the type species of the genus by monotypy. Both Laurillard and Gervais ([1850], p. 86) noted that the name *aurelianensis* had been used in a manuscript by Meyer for some dental and antler pieces from Montabuzard, France, which were illustrated but not named by Cuvier (1823, p. 103, pl. 8, figs. 3–6).

3. The antlers of *Cervus aurelianensis* Laurillard, figured by Cuvier (1823, pl. 8, figs. 3, 4), are of uncertain identity within the CERVIDAE, whilst the illustrated upper dentition (Cuvier, 1823, pl. 8, fig. 6) is congeneric with *Dorcatherium* Kaup, 1833 (family TRAGULIDAE). Stehlin (1925, p. 88) observed that Cuvier's antlers probably came from a more advanced deer than those illustrated by Gaudry. He designated *A. dichotoma* Gervais as the type species of *Procervulus* but this, however desirable, was an invalid designation (see para. 2 above).

4. Gervais (1859, p. 151) had recorded Lartet's opinion that not only was *Cervus aurelianensis* possibly a species of the Miocene cervid *Dicrocerus* Lartet, 1851 but so also was the *Antilope dichotoma* antler illustrated by Gervais ([1850], vol. 3, pl. 23, fig. 4). We are confident, however, that the latter is correctly placed in *Procervulus*.

5. The name *Procervulus* has been used consistently for species having antlers similar to those illustrated by Gaudry (1877a, fig. 100; 1877b, fig. 32), and *A. dichotoma* is currently always included in the genus. Examples of usage include the works by Roman & Viret (1934), Stehlin (1937), Rinnert (1956), Viret (1961), Ginsburg & Crouzel (1976), Vislobokova (1983), Ginsburg & Bulot (1987) and Azanza (1993). Recognition of *C. aurelianensis* as the type species of the genus would render *Procervulus* a subjective synonym of one of the names used for more advanced Miocene deer, either a junior synonym of *Dicrocerus* Lartet, 1851, or a senior synonym of *Euprox* or *Heteroprox*, both of Stehlin (1928). The last three names are all in use. To maintain the established usage of *Procervulus* we propose that Stehlin's (1925) designation be ratified and that *Antilope dichotoma* Gervais, 1849 be designated the type species.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Procervulus* Gaudry, 1877 and to designate *Antilope dichotoma* Gervais, 1849 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Procervulus* Gaudry, 1877 (gender: masculine), type species by designation in (1) above *Antilope dichotoma* Gervais, 1849;

(3) to place on the Official List of Specific Names in Zoology the name *dichotoma* Gervais, 1849, as published in the binomen *Antilope dichotoma* (specific name of the type species of *Procervulus* Gaudry, 1849).

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Comment on the proposed conservation of the generic and specific names of *Zanclea costata* Gegenbaur, 1856 (Cnidaria, Hydrozoa)
(Case 2806; see BZN **49**: 184–186)

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I support the application to conserve the generic and specific names of *Zanclea costata*, both of Gegenbaur (1856), which are widely used. *Z. costata* has appeared frequently in the primary literature (to my knowledge at least 25 times since its description) whilst the senior synonym *Mnestra parasites* Krohn, 1853, used for a deformed, parasitized medusa, has appeared only six or seven times since 1853. Rees (1953) was the first to point out that the latter taxon is probably identical with *Z. costata*. To replace *Zanclea* by *Mnestra*, or by *Acrochordium* Meyen, 1834, and *costata* by *parasites* would create real and unnecessary confusion, particularly for non-specialists. Moreover, the substitutions would not take effect for several decades because many marine ecologists would continue to use the old terminology.

Out of six nominal species of *Zanclea* at least three have been synonymised with *Z. costata*, which is circumtropical and very common.

Comment on the proposed confirmation of unavailability of the name *Fusus* Helbling, 1779 (Mollusca, Gastropoda)
(Case 2729; see BZN **48**: 92–96, 244–246; **49**: 68–70, 221–222, 289)

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I should like to comment on the case of *Fusus* Helbling, 1779 and to support with observational data the comments by Beu, Marshall & Ponder (BZN **49**: 68–70).

The protoconch characters which were used by Beu & Maxwell (1987) to separate the Indo-Pacific species of *Colubraria* on the one hand from the Mediterranean *C. reticularia* (Blainville, [1829]), which is probably the *Fusus intertextus* of Helbling (1779), on the other are not adequately diagnostic. A second *Colubraria*-like species has recently been found in the Mediterranean (Oliverio & Tringali, 1991). In the two closely related Mediterranean species both types of protoconch are represented, confirming Beu, Marshall & Ponder's statement (BZN **49**: 69) that protoconch characters cannot be used to separate the Mediterranean species from the Indo-Pacific group at any supraspecific level. Moreover I have observed that the well known *C. reticulata* (or *Fusus intertextus*: see BZN **48**: 93, paras. 5 and 6) lacks a radula, which further suggests its close relationship to the Indo-Pacific *Colubraria* species.

The suppression of the name *Fusus* Helbling, 1779 except for purposes of homonymy, as proposed by Beu, Marshall & Ponder (BZN **49**: 69), would prevent it displacing the well established *Colubraria* Schumacher, 1817, a name in use for many species. As pointed out by Petit & Wilson (BZN **48**: 92–96 and **49**: 221–222) the name *Fusus* has in the past been used in different senses. Adoption of it either for the

Colubraria group (following the sense of Helbling, 1779) or for *Fusinus* species (following that of Bruguière, 1789) would be potentially confusing. The suppression proposed by Beu, Marshall & Ponder conserves *Colubraria* and also protects the widely used *Fusinus* Rafinesque, 1815 from its senior synonym *Fusus* Bruguière, 1789. Adoption of this course seems to me to be the best solution of this case.

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Comment on the proposed precedence of *Taningia danae* Joubin, 1931 (Mollusca, Cephalopoda) over *T. persica* (Naef, 1923)
(Case 2845; see BZN **49**: 261–263)

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The application by Vecchione & Roper is a sensible way out of a problem, and I support all their proposals.

Comment on the proposed attribution of the specific name of *Ceratites nodosus* (Mollusca, Ammonoidea) to Schlotheim, 1813, with the designation of a lectotype
(Case 2732; see BZN **48**: 31–35, 246; **49**: 145–149, 290; **50**: 54–56)

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In supporting Urlichs's application regarding *Ceratites nodosus*, Hahn (BZN **48**: 246) states that acceptance of the proposals will conserve the name 'as used today'. In further support, Tichy (BZN **49**: 290) says that acceptance will 'conserve the established usage of the name *nodosus*'. Their comments create the impression that Urlichs's proposal will stabilize a taxonomic usage that has been established for a long time, but this view cannot be defended. The first major work dealing with *Ceratites nodosus* was Philippi (1901). In this the species is cited as '*Ceratites nodosus* (Brug.) Schloth.'. Bruguière's description of the taxon is in Philippi's synonymy and the illustration by Scheuchzer (1718) is given as the first published of the species. It is the specimen on which this drawing was based which, contrary to Urlichs's proposal, was designated as the lectotype for *Ceratites nodosus* (Bruguière) by Rieber & Tozer (1986). Bruguière is also cited as the author of the species in the comprehensive works which provide a synonymy of *C. nodosus* (Riedel, 1916; Spath, 1934; Penndorf, 1951; Wenger, 1957). The taxonomic usage defended by Hahn as being currently used was only initiated by Urlichs and Mundlos in 1987, hardly long enough ago to have originated a history of 'established usage' as referred to by Tichy. The complaint by Tichy that acceptance of Tozer's proposal (BZN **49**: 148) will

necessitate transfer of the name *Ceratites (Ceratites) nodosus* to *Ceratites (Dolocer-atites) robustus* Riedel, 1916 is not germane. This is not an objective necessity but only a consequence of accepting the subjective synonymy proposed by Urlichs & Mundlos (1987).

Comments on the proposed conservation of the specific names of *Gebia major capensis* Krauss, 1843 and *G. africana* Ortmann, 1894 (currently *Upogebia capensis* and *U. africana*; Crustacea, Decapoda) by the designation of a replacement neotype for *U. capensis*
(Case 2827; BZN **49**: 187–190)

(1) C.L. Griffiths

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The species currently known by the names *Upogebia capensis* (Krauss, 1843) and *U. africana* (Ortmann, 1894) are amongst the better-known elements of the South African marine fauna and are extensively used by fishermen for bait. The names are thus well known not only in the specialist literature but also in general guide books and, indeed, in the laws governing seashore exploitation. It would therefore be very confusing if these names were unnecessarily changed. I therefore support the proposed replacement of the neotype for *U. capensis*, thus conserving the present usages.

(2) W. Emmerson

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I have recently read the application by Ngoc-Ho & Poore to conserve the specific names of *Upogebia capensis* (Krauss, 1843) and *U. africana* (Ortmann, 1894). Although I was aware of Sakai's (1982) name changes these do not appear to have been followed except in a catalogue by Holthuis (1991) who noted the unfortunate consequences. Certainly everyone here in South Africa still maintains the established usages. To avoid confusion I support the application and the proposed replacement neotype.

Editorial note. The comments below are from members of the Nomenclature Committee of The Crustacean Society.

(3) K. Baba

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As has been explained by Ngoc-Ho & Poore in their application, Sakai's (1982) selection of the neotype for *Upogebia capensis* from material assigned to *U. africana* has caused a problem. The authors believe that *capensis* and *africana* are distinct species, separated from each other not only morphologically but also ecologically

and geographically. I agree with them and support the replacement of Sakai's neotype with the specimen they have selected.

(4) Thomas E. Bowman

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I agree that Sakai's choice of a neotype for *Upogebia capensis* was ill-advised and upsets the usage of more than 40 years of that name and of *U. africana*. I recommend that the Commission approves the application by Ngoc-Ho & Poore.

(5) Joel W. Martin

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The action proposed by Ngoc-Ho & Poore would remove current confusion resulting from what was obviously an unfortunate selection of a neotype by Sakai (1982). The species called *Upogebia capensis* (Krauss, 1843) and *U. africana* (Ortmann, 1894) are distinguishable morphologically and ecologically and it is clear that Sakai's choice of a neotype for *capensis* came from habitat suited for, and material previously identified as, *U. africana*. Further confusion resulted from Sakai's revival of *U. subspinosa* (Stimpson, 1860), for which no type exists and which was previously considered by Barnard (1947) as a synonym of *capensis*. The selection of a replacement neotype for *U. capensis* is clearly warranted and would clarify the taxonomic and ecological status of the two South African species of *Upogebia*. I therefore support the application.

(6) Austin B. Williams

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Evidence presented by Ngoc-Ho & Poore confirms the conclusions of the numerous authors cited by them that two species of *Upogebia* occur in South Africa, known as *U. capensis* (Krauss, 1843) and *U. africana* (Ortmann, 1894), that these names should be conserved, and that a replacement neotype for *U. capensis* should be designated from material of that species as currently understood.

The only species of *Upogebia* that has a gill associated with the fifth pereopod on the last thoracic somite is *africana*. That alone should establish the identity of this species and, in combination with other characters summarized by Ngoc-Ho & Poore, be entirely sufficient to distinguish it from *capensis*. USNM 105367 in the crustacean collection of the National Museum of Natural History, Smithsonian Institution, Washington, D.C., is a group of 102 specimens of *U. africana* from Knysna, South Africa, collected by J.H.O. Day in January 1957. The gill on the last thoracic somite is clearly present on these specimens. Since Sakai's (1982) neotype of *capensis* is from Knysna there is a strong possibility that the specimen bears such a gill also and is therefore *africana*.

Knysna, about 250 km west of Port Elizabeth, must be the western limit for *U. africana*; experimental studies on the species in a heated pond adjacent to a power plant have been done here on a number of occasions (selected references are given in the application). Mossel Bay, about 100 km further west, is supposedly the eastern limit for *U. capensis*. Sakai's choice of a neotype for '*U. capensis*' from Knysna did not meet the locality requirement of Article 75d(5) of the Code.

Comment on the proposed conservation of the specific name of *Cliola* (*Hybopsis*) *topeka* Gilbert, 1884 (currently *Notropis topeka*) (Osteichthyes, Cypriniformes)
(Case 2808; see BZN **49**: 268–270)

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The case for the conservation of the specific name of *Notropis topeka* (Gilbert, 1884) for the Topeka shiner, as presented by Cross & Collins, is overwhelmingly convincing and has my full support. The attempt in 1989 to revive the specific name *tristis* Girard, 1857 for the taxon is another example of the unfortunately frequent disregard by specialists of the urgent need of non-specialists for nomenclatural stability.

Comment on the proposed conservation of the specific names of *Mugil curema* and *M. liza* Valenciennes in Cuvier & Valenciennes, 1836 (Osteichthyes, Perciformes)
(Case 2834; see BZN **49**: 271–275)

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1. In this contribution I designate lectotypes for the nominal species *Mugil curema*, *M. liza* and *M. petrosus*, all of Valenciennes in Cuvier & Valenciennes (1836). I support the application by Alvarez-Lajonchere, Trewavas & Howes.

2. Alvarez-Lajonchere and his co-authors gave good evidence that the type material of *Mugil brasiliensis* Spix in Spix & Agassiz, 1831 and *M. gaimardianus* Desmarest, 1831 is no longer available and that the original descriptions were unreliable. Therefore, I support the proposals to suppress these specific names and to conserve the names *M. curema* and *M. liza*, both of Valenciennes in Cuvier & Valenciennes (1836). However, the authors noted (para. 7 of the application) that *M. liza* is composite and there are also problems, which were not mentioned in paras. 6 and 7, with the syntypes of both *M. curema* and *M. petrosus* Valenciennes, 1836.

3. Alvarez-Lajonchere et al. (para. 7) referred to the four syntypes of *M. curema* in the Muséum National d'Histoire Naturelle, Paris (MNHN), listed by Blanc & Hureau (1971, p. 689): MNHN A.3653, collected by Choris from 'San Iago de Cuba' (the 19th century spelling of Santiago de Cuba); A.4641, collected from Maracaïbo by Plée; A.4655 and A.4671, collected from Martinique by Plée. Neither account, Blanc & Hureau (1971) and Alvarez-Lajonchere et al. (para. 7), mentioned material

from Brazil despite the fact that Valenciennes (1836, p. 88) stated that he had received *curema* from Bahia and referred to a specimen of 'neuf à dix pouces'. This specimen exists and is listed in the original registers (MNHN A.3638, from an unstated collector but perhaps Delalande since he collected other Brazilian mullets) as a syntype of *curema*. The specimen (240 mm standard length, 306 mm total length) generally conforms to Valenciennes's description of the species: it is moderately deep-bodied, the head is slightly deeper than broad, the second dorsal and anal fins are totally covered by scales, A III,9, the body is silvery-gold without longitudinal brown stripes and the caudal fin has a blackish distal margin. I count nine filamentous rays in the second dorsal fin of this specimen (Valenciennes stated I,9) and I count 37 scales between the operculum and the caudal fin base (Valenciennes stated 35 or 36 in longitudinal line). I do not regard these small meristic differences as significant. Since the specimen is in better condition than all the other syntypes I hereby designate it as the lectotype of *M. curema*.

4. I identify specimen MNHN A.4641 (noted above) as *M. hospes* Jordan & Culver, 1895. It has a rather slender body, a long, right pectoral fin (ca. 92% of head length), ca. 38–40 scales between the opercular opening and the base of the caudal fin, a rather thin upper lip, and I,14 pectoral rays (cf. I,16 (17?) in the lectotype and other paralectotypes of *curema*). The specimen is in very poor condition and could easily be mistaken for *curema*. It is marked as a syntype of *curema* in the register and card index of the MNHN but I am doubtful about its type status since Valenciennes's original description made no reference to material collected from Maracaïbo by Plée. Valenciennes (p. 88) referred to specimens of 'un pied et de quinze pouces dans les collections de M. Plée' but evidently these are the specimens from Martinique.

5. *M. petrosus* Valenciennes (1836, p. 89) has been cited as a synonym of *curema* by previous authors (see para. 6 of the application). The original description was very short, indicating that the species was similar to *curema* and referring to specimens from Brazil, Surinam, Gulf of Mexico, Cuba and New York. Brazilian material was not included in Blanc & Hureau's (1971) type catalogue and I cannot find reference to any in the registers and card indexes of the MNHN. In 1954–1955 a number of dry, badly preserved specimens were discarded and these included some Brazilian material (M.-L. Bauchot, pers. comm.) and possibly syntypes of *petrosus*. The extant syntypes represent more than one species. Two syntypes from Surinam (MNHN A.3611 collected by Leschenault; MNHN A.3612, collected by Levaillant) are *M. incilis* Hancock, 1830. Another two syntypes (MNHN A.3614, from Vera-Cruz, by an unstated collector; MNHN A.3615, from New York, collected by Milbert) are clearly *curema*. The latter species is common in warm, tropical and subtropical coastal waters of the Caribbean and Atlantic but has also been reported as far north as Cape Cod, Massachusetts (Jordan & Swain, 1884). This northerly range might be possible because of the presence of the warm Gulf Stream but, nevertheless, I have some reservations about the records from New York and Massachusetts. Milbert dispatched his material to Paris from New York but his collections were less precisely defined as coming from the coasts, rivers and lakes of that area (Bauchot, Daget & Bauchot, 1990, p. 109). Therefore, the reported locality of 'New York' for Milbert's syntype of *petrosus* should not be considered as exact and irrefutable.

6. I now designate the remaining syntype of *M. petrosus* as the lectotype of that nominal species. This is specimen MNHN A.3613, collected from Cuba by

Desmarest and referred to by Alvarez-Lajonchere et al. (para. 6). It is 117.9 mm standard length and 150.1 mm total length. This specimen is very similar to those of *curema* but it has a rather long pectoral fin (83% of head length) which almost reaches the level of the origin of the first dorsal fin, and the first dorsal is positioned closer to the base of the caudal fin than it is to the snout. Some authors have described or illustrated these features for the nominal species *M. gaimardianus* Desmarest, 1831 (for example, Jordan & Swain, 1884; Menezes, 1983, fig. 6) and Alvarez-Lajonchere et al. noted (para. 6) that the specimen might be the holotype. I agree with them that this cannot be proved. The morphometric features of the specimen can be interpreted as within intraspecific variation of *curema* and I agree with Alvarez-Lajonchere et al. (para. 6) that it is most likely this species. Designation of this Cuban specimen as the lectotype of *petrosus* renders the latter a junior subjective synonym of *curema* and thereby ensures nomenclatural stability.

7. In their search for the Cuban holotype of *M. gaimardianus* Desmarest, Alvarez-Lajonchere et al. (para. 6) stated 'there are no specimens from Cuba among the syntypes of *M. curema*'. This is incorrect; Valenciennes received a specimen of *curema* from Choris (MNHN A.3653; see para. 3 above) who collected in Cuba and the Antilles in 1827 (Bauchot, Daget & Bauchot, 1990). Desmarest might have used this specimen for his illustration of *gaimardianus* but again this cannot be proved.

8. Alvarez-Lajonchere et al. (para. 7) stated that the syntypes of *M. liza* Valenciennes include representatives of more than one species but they did not designate a lectotype. Valenciennes (1836, p. 84) referred to specimens from various localities but did not ascribe importance to any particular one. He stated that Delalande brought specimens from Brazil but this material was not included in Blanc & Hureau's (1971) type catalogue and I could not find it listed in the original registers or card indexes of the MNHN; presumably these specimens were either never incorporated into the collections (and Valenciennes himself did not see them) or they have been lost subsequently. Two of the extant syntypes (MNHN A.3668, collected from Surinam by Leschenault & Doumerc; A.6307, collected from Buenos Aires by d'Orbigny) are *M. cephalus* Linnaeus, 1758. The remaining syntypes (MNHN A.1050, A.4642, A.4656, A.4657, A.4659 and A.5763; see Blanc & Hureau, 1971, for details) have elongate bodies and 29–33 scales between the opercular opening and the base of the caudal fin. These more closely fit Valenciennes's original description of *liza*. They are all dry specimens and, while none is in exceptionally good condition, some are better preserved than others. The specimen that I select as lectotype is rather large but most of its morphological and meristic features are more clearly displayed than in several other specimens. This is MNHN A.4659, collected from Martinique by Plée, noted as a female on the baseplate and of 476 mm standard length and at least 566 mm total length (caudal fin damaged).

9. Valenciennes (1836, p. 84) mentioned that some of Plée's specimens of *liza* came from Puerto Rico. However, Blanc & Hureau (1971) made no reference to such material in their type catalogue. They incorrectly noted specimen MNHN A.5763 as from Martinique and overlooked the presence of an apparently original label placed securely in the specimen's mouth recording 'Porto-Rico'. The incorrect locality Martinique might have resulted from Plée's practice of collecting material from various localities and then dispatching it to Paris from Martinique (M.-L. Bauchot, pers. comm.).

10. Valenciennes's description of *liza* was short and some fin ray counts were inaccurate; for example, I find D2 to be 9, not I,8; P is I,15–17? (usually I,16), not 14. More complete descriptions were given by various other authors; see, for example, Jordan & Swain (1884), Thomson (1977), and Menezes (1983) who provided a detailed and accurate illustration (fig. 7) of the species.

Acknowledgements
I am grateful for the practical assistance of the staff of the MNHN, particularly M.-L. Bauchot, G. Duhamel and J.-C. Hureau. G.J. Howes and J. Snoeks helpfully discussed the case. This work was conducted while the author was in receipt of a Council of the European Communities Science Programme bursary.

Additional references

Bauchot, M.-L., Daget, J. & Bauchot, R. 1990. L'ichtyologie en France au début du XIX^e^ siècle. L'Histoire naturelle des Poissons de Cuvier et Valenciennes. *Bulletin du Muséum National d'Histoire Naturelle*, (4)**12A**(1) supplément: 3–142.

Blanc, M. & Hureau, J.-C. 1971. Catalogue critique des types de Poissons du Muséum national d'Histoire naturelle. (Mugiliformes et Polynémiformes). *Bulletin du Muséum National d'Histoire Naturelle*, (3)**15** : 673–734.

Comments on a proposed neotype for *Coelophysis bauri* (Cope, 1887) (Reptilia, Saurischia)

(Case 2840; see BZN **49**: 276–279)

(1) P.K. Tubbs
Executive Secretary, International Commission on Zoological Nomenclature

If this application is approved by the Commission the names of *Coelophysis bauri* and *Rioarribasaurus colberti* will be objective synonyms; as these are the type species of the nominal genera, *Coelophysis* and *Rioarribasaurus* will also be synonymous (para. 11 of the application). The mention of *Coelurus* instead of *Coelophysis* as the synonym of *Rioarribasaurus* in the last sentence of para. 10 was a typographical error in this office.

(2) Adrian P. Hunt
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1. We oppose the attempt by Colbert et al. to suppress the binomen *Rioarribasaurus colberti* by establishing a neotype for *Coelophysis bauri*.

2. Colbert (1947) assigned complete skeletons of Late Triassic dinosaurs from the Ghost Ranch dinosaur quarry in Rio Arriba County, New Mexico to the nominal

species *Coelophysis bauri* (Cope, 1887). This assignment has never been adequately justified, and recent studies (Padian, 1986; Hunt & Lucas, 1991) indicate that the original specimens of *C. bauri* (including the lectotype, specimen AMNH 2722) are not diagnostic. Colbert et al. provide no arguments to the contrary except to state (para. 8) that the synonymy is 'obvious'. The purpose of their application is simply to perpetuate Colbert's (1947) error by making one of the Ghost Ranch specimens the neotype of *C. bauri*, even though this specimen is the validly defined holotype of another nominal taxon, *Rioarribasaurus colberti*. Their application, which seeks to designate a neotype, is not in the context of revisory work as mandated by Article 75b of the Code; indeed, it asks the Commission to undertake revisory work.

3. Original specimens and a valid lectotype of *Coelophysis bauri* are extant (Huene, 1915; Colbert, 1989), so that the proposed neotype is contrary to Recommendation 75A of the Code; contrary to Article 75d(5), Colbert et al. choose a specimen collected 60 years after the lectotype from a locality and stratigraphic horizon different from the type locality.

4. With regard to the type locality of *C. bauri*, we note that David Baldwin, who collected the syntypes, gave very imprecise information and indicated that the specimens came from two separate localities (Colbert, 1989; Hunt & Lucas, 1991). One of these localities was 'Arroyo Seco', a tributary of the Rio Chama, which traverses 14.4 km of Triassic strata (Colbert, 1989). Colbert et al. (para. 1) state that this locality of Baldwin's was near the confluence of Arroyo Seco and Rio Chama; this has not been suggested before, notably not by Colbert (1989, pp. 4–6) who studied Baldwin's locality information in detail. If this suggestion is correct it places the type locality of *C. bauri* several km from the Ghost Ranch dinosaur quarry (Hunt & Lucas, 1991, fig. 1). The different preservation of the *C. bauri* bones and those from the Ghost Ranch quarry has been noted by Padian (1986) and Hunt & Lucas (1991), and suggests that the material came from different localities.

5. The contention of Colbert et al. (paras. 4 and 8) that the Ghost Ranch quarry and the type locality of *C. bauri* are in the same geological formation is based on an unpublished paper by Schwartz & Gillette. We have conducted detailed geologic studies of the Upper Triassic strata of the Chama basin and and have measured a stratigraphic section through the Ghost Ranch quarry which we correlated with others in surrounding areas (Hunt & Lucas, 1989; Lucas & Hunt, 1992). We are confident that there is strong circumstantial evidence that Cope's specimens did not come from the same geological formation as the Ghost Ranch skeletons: (a) the Ghost Ranch quarry is in a stratigraphic unit (Rock Point Formation) distinct from underlying fossiliferous strata (Stewart, Poole & Wilson, 1972; O'Sullivan, 1974; Dubiel, 1989; Lucas & Hunt, 1992); (b) in the Chama basin there is only one fossiliferous locality in the Rock Point Formation, and this is the Ghost Ranch quarry; (c) the Rock Point Formation has been removed by erosion from the Gallina area, where some of the *Coelophysis* syntypes were collected (Colbert, 1989; Hunt & Lucas, 1991; Lucas & Hunt, 1992); (d) the Rock Point Formation is more silty than underlying strata and in most areas forms precipitous slopes which are impossible to prospect for fossils; (e) the majority of fossiliferous strata in the area belong to the Petrified Forest Formation; and (f) the preservation of the *Coelophysis* specimens is distinct from that of *Rioarribasaurus*, as noted above. It appears very unlikely that Cope's specimens came from the Rock Point Formation: they most probably derive

from the underlying Petrified Forest Formation (Hunt & Lucas, 1991; Lucas & Hunt, 1992). Colbert et al. do not demonstrate that the Ghost Ranch quarry is in the same stratigraphic formation as the type locality of *C. bauri* and only cite unpublished literature to contest our carefully argued claim that the two fossiliferous localities are in different stratigraphic units which are superposed and thus of different ages.

6. Colbert et al. say (para. 10) that in their opinion the lectotype of *Coelophysis bauri* is 'undoubtedly conspecific' with the holotype of *Rioarribasaurus colberti*. They do not say why this 'synonymy' is 'undoubted' and do not comment on the morphological arguments to the contrary by Padian (1986) and Hunt & Lucas (1991). It is clear that primitive ceratosaurian dinosaurs are very similar morphologically. We note that Colbert (1989, p. 125), in describing the Ghost Ranch skeletons, stressed the close osteological similarities between the New Mexico specimens and *Syntarsus* and stated that 'these two dinosaurs are so similar in many of their anatomical characters that more often than not the description of any particular feature of the one applies equally to the other'. We note further that several ceratosaurian dinosaurs were present in the Late Triassic (Hunt, 1991). At least one specimen of *Coelophysis* has an important morphological feature not found in *Rioarribasaurus*. Specimen AMNH 2724 (Huene, 1915, fig. 61; Colbert, 1989, fig. 18.61) is a pubic fragment displaying the dorsal margin of an obturator foramen. No obturator foramen is present in any specimen of *Rioarribasaurus* (cf. Colbert, 1989, fig. 77), and the presence or absence of one is a generic-level distinction in all dinosaurs. We are confident that Colbert et al. cannot demonstrate the 'synonymy' of *Coelophysis bauri* and *Rioarribasaurus colberti* because (a) all the specimens of *C. bauri* except AMNH 2724 lack diagnostic features; (b) most of the elements of *Rioarribasaurus* are (as noted by Colbert, 1989) similar to those of other Late Triassic primitive ceratosaurians; (c) specimen AMNH 2724 of *Coelophysis* has a character not seen in *Rioarribasaurus*. If the identity of these two taxa cannot be demonstrated it is clear that a neotype of *C. bauri* should not be proposed from among the specimens of *R. colberti*.

7. Colbert et al. comment on the wide use of the generic name *Coelophysis*. This usage, however, is only entrenched in a technical literature of specialists in dinosaur studies and, moreover, it is based on Colbert's (1947) unsupportable assignment of the nomen dubium *Coelophysis bauri* to the skeletons from Ghost Ranch. The fact that one recent paper (Rowe & Gauthier, 1990; see para. 7 of the application) perpetuates this error is irrelevant. It is also irrelevant that the Ghost Ranch dinosaur (not named as *Coelophysis*) is part of the logo of the New Mexico Museum of Natural History and Science. Even if this dinosaur were named in the logo, does the fact that *Brontosaurus*, the junior synonym of *Apatosaurus*, appeared on a U.S. postage stamp argue for usage of that invalid name? Similarly, the fact that *Coelophysis bauri* is the state fossil of New Mexico is irrelevant. The reason that some dinosaur literature from 1947 uses the name *Coelophysis* for the Ghost Ranch specimens and that this taxonomic assignment has not been questioned until recently is because the description of the specimens was delayed until Colbert (1989).

8. Colbert et al. (para. 10) note that they wish to make the 'obvious' synonymy objective and to have a 'much more informative' type specimen of *C. bauri*. Thus, they suggest making the holotype of *R. colberti* the neotype of *C. bauri*. This is, quite simply, a recipe for taxonomic anarchy. Two issues are raised. The first is the

adoption of a neotype to make a synonymy objective. Is every worker now to erect neotypes to protect his favorite nomen dubium and to establish its synonymy with another valid name? This is clearly against the spirit and the letter of the Code and is a recipe for taxonomic chaos. The second issue is the suggestion that a neotype should be erected because a specimen displays more morphological features than an extant type. Is every new specimen of a taxon which displays more features than a holotype or lectotype now to be made a neotype? Again this is a very dangerous suggestion that strikes at the very heart of taxonomic stability.

9. Colbert et al. (para. 8) say that 'Hunt & Lucas (1991) did not dispute the synonymy of *C. bauri* (as always understood) and *R. colberti*'. However, we considered the name *Coelophysis bauri* to be a nomen dubium and thus obviously did not consider it to be a synonym of *R. colberti*.

10. In summary, we believe the application should be rejected because (a) a lectotype and other original specimens of *Coelophysis bauri* exist; (b) the proposed neotype is not from either the type locality or horizon of *C. bauri*; (c) the proposed neotype is not demonstrably the same taxon as the lectotype of *C. bauri*; and (d) the name *Coelophysis* is only used in a limited technical literature.

Additional references

Dubiel, R.F. 1989. Depositional environments of the Upper Triassic Chinle Formation in the eastern San Juan Basin and vicinity. *United States Geological Survey Bulletin*, **1808B**: 1–22.

Hunt, A.P. 1991. The early diversification pattern of dinosaurs in the Late Triassic. *Modern Geology*, **16**: 43–60.

Hunt, A.P. & Lucas, S.G. 1989. Stratigraphy and vertebrate biochronology of Upper Triassic strata in the Chama basin, north-central New Mexico. P. 16 *in*: *Abstracts of Symposium on Southwestern Geology, Museum of Northern Arizona.*

Lucas, S.G. & Hunt, A.P. 1992. Triassic stratigraphy and paleontology, Chama basin and adjacent areas, north-central New Mexico. Pp. 151–172 *in* Lucas, S.G., Kues, B.S., Williamson, T.E. & Hunt, A.P (Eds.), *San Juan Basin IV*. New Mexico Geological Society, Socorro.

O'Sullivan, R.B. 1974. The Upper Triassic Chinle Formation in north-central New Mexico. Pp. 171–174 *in* Siemers, C.T. (Ed.), *Ghost Ranch, central New Mexico*. New Mexico Geological Society, Socorro.

Stewart, J.H., Poole, F.G. & Wilson, R.F. 1972. Stratigraphy and origin of the Chinle Formation and related Upper Triassic strata in the Colorado Plateau region. *United States Geological Survey Professional Papers*, **690**: 1–336.

(3) Robert M. Sullivan
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The recent application by Colbert et al. to designate a neotype in lieu of the lectotype of *Coelophysis bauri* is indefensible and should be rejected based on the following points:

1. In the absence of shared-derived characters, the Ghost Ranch dinosaur specimens (including AMNH 7224, which is the holotype of *Rioarribasaurus colberti* and the would-be neotype of *Coelophysis bauri*) cannot be referred to the same taxon as the type (lectotype) material of *Coelophysis bauri* (see Padian, 1986; Hunt & Lucas, 1991).

2. Despite Colbert's description and illustrations of the pelves of Ghost Ranch specimens as lacking both obturator foramina and the pubic fenestrae these osteological landmarks are now known to occur on the pelves of some Ghost Ranch skeletons (Rowe & Gauthier, 1990, and personal observation). The lack of these features in the holotype of *Rioarribasaurus colberti* (AMNH 7224) may be real, or they may have been destroyed in preparation.

3. If the former is the case, the presence of the dorsal margin of an obturator foramen on a pubis fragment (AMNH 2724) from the syntypic series of *Coelophysis bauri* (see Colbert, 1989, p. 38, fig. 61a) is not distinctive (plesiomorphic), because reference to *Syntarus rhodesiensis* can also be made.

4. If the pubic fenestrae and obturator foramina were destroyed on the holotype of *R. colberti* in the course of preparation, and if it could be unequivocally determined that only one dinosaur taxon is present among the Ghost Ranch material, then *Coelophysis bauri* is a nomen dubium because of the undiagnostic nature of the type material.

5. The acceptance by Rowe & Gauthier (1990) of the name *C. bauri* for the Ghost Ranch specimens was done in the absence of any critical osteological analysis and merely out of convention, coupled with the assumption that only one saurischian taxon was present in the Late Triassic strata of New Mexico.

6. It is an established fact that the type (lectotype) material of *C. bauri* is not from the Whitaker (Ghost Ranch) quarry. Evidence (Hunt & Lucas, 1991) suggests that the specimens are from a different geographic locality, albeit nearby (within 2 km).

7. In the absence of diagnostic features, stratigraphic / biostratigraphic position and geographic proximity cannot be used as evidence in support of, or against, taxonomic identity of the proposed neotype and the original type material.

8. Therefore, Colbert et al.'s selection of AMNH 7224 as the neotype of *Coelophysis bauri* is inappropriate and contrary to Article 75d(5) and Recommendation 75A of the Code.

(4) Hans-Deuter Sues
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I strongly support the application by Dr E.H. Colbert and his colleagues to set aside all previous fixations of type specimens for the nominal species *Coelurus bauri* Cope, 1887 and to designate the complete articulated skeleton AMNH 7224 in the collections of the American Museum of Natural History (New York) as the neotype. I also concur that *Rioarribasaurus* and *colberti* should be placed on the relevant Indexes of Rejected and Invalid Names in Zoology.

I urge the Commission to rule in favour of this important application. The original type specimens of many other fossil vertebrates pose comparable problems (a good example is *Archaeopteryx lithographica*), and we may expect a profusion of unnecessary names if this application is not accepted.

OPINION 1717

Bucephalus Baer, 1827 and *B. polymorphus* Baer, 1827 (Trematoda): conserved in their accepted usage

Ruling

(1) Under the plenary powers all previous fixations of type specimens for the nominal species *Bucephalus polymorphus* Baer, 1827 are hereby set aside and microscopic preparation no. 1655b in the Zoological Museum, Humboldt University, Berlin (the lectotype of *Gasterostomum fimbriatum* Siebold, 1848) is designated as the neotype.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Bucephalus* Baer, 1827 (gender: masculine), type species by monotypy *Bucephalus polymorphus* Baer, 1827;

(b) *Rhipidocotyle* Diesing, 1858 (gender: feminine), type species by subsequent designation by Nicoll (1914) *Gasterostomum minimum* Wagener, 1852 (a junior subjective synonym of *Monostoma galeatum* Rudolphi, 1819).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *polymorphus* Baer, 1827, as published in the binomen *Bucephalus polymorphus* and as defined by the neotype designated in (1) above (specific name of the type species of *Bucephalus* Baer, 1827);

(b) *galeatum* Rudolphi, 1819, as published in the binomen *Monostoma galeatum* (senior subjective synonym of the specific name of *Gasterostomum minimum* Wagener, 1852, the type species of *Rhipidocotyle* Diesing, 1858);

(c) *campanula* Dujardin, 1844, as published in the binomen *Distoma campanula*.

(4) The name *Gasterostomum* Siebold, 1848 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Bucephalus* Baer, 1827).

(5) The name *fimbriatum* Siebold, 1848, as published in the binomen *Gasterostomum fimbriatum* and as defined by the lectotype designated by Baturo (1979), is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology (a junior objective synonym of the specific name of *Bucephalus polymorphus* Baer, 1827).

History of Case 2251

An application for the conservation of the generic and specific names of *Bucephalus polymorphus* Baer, 1827 by the designation of a neotype was received from Dr B. Baturo (*Inland Fisheries Institute, Olsztyn, Poland*) on 27 February 1978. Notice of the case was sent to appropriate journals. The history of this long-standing case was summarised in notes on BZN **49**: 6 and 62. After correspondence the case was republished in BZN **49**: 6–11 (March 1992) with the agreement of Dr Baturo.

Dr Srivastava (*Zoological Survey of India, Calcutta*), who opposed Dr Baturo's original application published in BZN **36**: 30–36 (July 1979), was notified (August 1991) of the intention to republish it. Dr David I. Gibson (*The Natural History*

Museum, London, U.K.) had also written to Dr Srivastava in September 1988. There has been no reply to either communication.

A shortened version of Dr Srivastava's comment (received January 1981) was published (BZN **49:** 62–64) at the same time as the republished application, together with recent comments in support of Dr Baturo's application from Dr Gibson, Dr O.N. Pugachev (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*) and Prof J.C. Pearson (*University of Queensland, Australia*). A copy of these comments was sent to Dr Srivastava at the time of publication.

It was noted on the voting paper that the essential difference between Dr Baturo's position and that of Dr Srivastava was that the former proposed conservation of the established usage of the names *Bucephalus* and *polymorphus*, whereas the latter (following priority strictly) would transfer these names to the taxon known as *Rhipidocotyle illensis* (= *campanula*). Drs Gibson and Pugachev and Prof Pearson opposed the replacement of *Rhipidocotyle* by *Bucephalus* (and of *Bucephalus* auctt. by *Gasterostomum*) which would result from adherence to priority.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 9–10. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Bouchet (in part), Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 4: Lehtinen, Martins de Souza, Štys and Thompson.

Bouchet supported conservation of the usage of *Bucephalus polymorphus* but considered that the Commission should not be involved with questions of subjective synonymy such as the placing of *Rhipidocotyle galeata* and *R. campanula* on the Official List of Specific Names. (*Editorial note*. The type of *Rhipidocotyle* is the nominal species *Gasterostomum minimum*, as given in ruling (2)(b). It has long been the practice to cite senior subjective synonyms of type species in the Official Lists (in accordance with Recommendation 67B of the Code) but in this and all other cases it is not to be inferred that the Commission takes any view on the taxonomic synonymy. *R. campanula* is placed on the List as a senior subjective synonym of *R. illensis*, repeatedly mentioned in this case; again the Commission has taken no view on the supposed synonymy and the placing of names on Official Lists confers no special status on them (Article 78f of the Code)).

Lehtinen and Martins de Souza commented that with the current taxonomic knowledge of the group it was preferable that priority should apply. Štys commented: 'In cases concerning names of species with complex development it is better to stay with the generally understood Principle of Priority when discoveries in taxonomy lead to concomitant nomenclatural changes, rather than to make exceptions by invoking the plenary powers. Zoologists studying such groups should expect and be prepared to accept such name changes'.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Bucephalus Baer, 1827, *Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, **13**: 570.

campanula, *Distoma*, Dujardin, 1844, *Histoire naturelle des helminthes ou vers intestinaux*, p. 435.

fimbriatum, *Gasterostomum*, Siebold, 1848, *Lehrbuch der vergleichende Anatomie der wirbellosen Thiere*, vol. 1, p. 129.

galeatum, *Monostoma*, Rudolphi, 1819, *Entozoorum synopsis, cui accedunt mantissa duplex et indices locupletissimi*, p. 86.

Gasterostomum Siebold, 1848, *Lehrbuch der vergleichende Anatomie der wirbellosen Thiere*, vol. 1, p. 129.

polymorphus, *Bucephalus*, Baer, 1827, *Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, **13**: 570.

Rhipidocotyle Diesing, 1858, *Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften*, **32**: 313.

The following is the reference for the designation of *Gasterostomum minimum* Wagener, 1852 as the type species of the nominal genus *Rhipidocotyle* Diesing, 1858:
Nicoll, W. 1914. *Journal of the Marine Biological Association of the U.K.*, (2)**10**: 490.

The following is the reference for the designation of the lectotype of *Gasterostomum fimbriatum* Siebold, 1848:
Baturo, B. 1979. BZN **36**: 33.

OPINION 1718

Balea Gray, 1824 (Mollusca, Gastropoda): conserved

Ruling

(1) Under the plenary powers the generic name *Strombiformis* Da Costa, 1778 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Eulima* Risso, 1826 (gender: feminine), type species by subsequent designation by Herrmannsen (1847) *Turbo subulatus* Donovan, 1804 (an unnecessary replacement name for *Strombiformis glaber* Da Costa, 1778), is hereby placed on the Official List of Generic Names in Zoology.

(3) The entry for *Balea* Gray, 1824 on the Official List of Generic Names in Zoology is hereby amended to record the type species as *Turbo perversus* Linnaeus, 1758 by subsequent designation by Turton (1831).

(4) The name *glaber* Da Costa, 1778, as published in the binomen *Strombiformis glaber* and as defined by the neotype designated by Warén (1989) (senior objective synonym of the specific name of *Turbo subulatus* Donovan, 1804, the type species of *Eulima* Risso, 1826), is hereby placed on the Official List of Specific Names in Zoology.

(5) The name *Strombiformis* Da Costa, 1778, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2247

An application which involved the conservation of *Balea* Gray, 1824 was received from Dr Anders Warén (*Naturhistoriska Riksmuseet, Stockholm, Sweden*) on 18 January 1978. After correspondence on various matters the case was published in BZN **49**: 12–15 (March 1992). Notice of the case was sent to appropriate journals.

Draparnaud's work *Histoire naturelle des mollusques* ... was published posthumously in 1805 and included (p. 68, pl. 4, fig. 4) a description and illustration of his species *Pupa fragilis*; *Turbo perversus* Linnaeus, 1758 was not mentioned. A shorter version of the work (*Tableau des mollusques* ...) had appeared in 1801, during Draparnaud's lifetime, and here (p. 64) *fragilis* was more briefly described with *perversus* Linnaeus being cited as a synonym. Thus although the name *fragilis* was made available in 1801 it was as a junior synonym of *perversus*. Subsequent authors have accepted Draparnaud's own synonymy of *fragilis* with *perversus*.

It was noted on the voting paper that Gray (1824) established *Balea* with three included species, among them *Pupa fragilis* Draparnaud, 1801 with *T. perversus* placed in synonymy (para. 2 of the application). Gray's use of the junior synonym presumably followed Draparnaud. Herrmannsen (1846) designated *T. perversus* as the type species without mentioning *fragilis* but in Opinion 335 (March 1955) *Balea* was placed on the Official List of Generic Names with *Pupa fragilis* wrongly cited as the designated type species. The senior synonym *perversus* was placed on the Official List of Specific Names as being the valid name of the type species. In a later publication Gray himself (1847) cited *T. perversus* as the type species of *Balea* and did not mention *P. fragilis*. The usage of *Balea* has almost always treated *perversus* as the nominal type species, with *fragilis* (when mentioned) as a junior synonym.

A comment (received during the voting period) from Mr Robert Burn (*Newtown, Geelong, Victoria, Australia*) noted that Turton (1831, p. 7) had designated *Turbo perversus* 'Montagu' as the type species of *Balea* and that this considerably predated Herrmannsen's (1846) designation.

Additional reference

Draparnaud, J.-P.-R. 1805. *Histoire naturelle des mollusques terrestres et fluviatiles de la France.* (Ouvrage posthume). viii, 164 pp., 13 pls. Paris.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 13. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Štys, Trjapitzin, Uéno, Willink

Negative votes — 2: Starobogatov and Thompson.

Heppell pointed out that the title of the paper by Harris (1894) is correctly cited as 'On the alteration of the generic name *Clausilia*'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Balea Gray, 1824, *Zoological Journal*, **1**: 61.

Eulima Risso, 1826, *Histoire naturelle des principales productions de l'Europe méridionale et particulièrement de celles des environs de Nice et des Alpes Maritimes*, vol. 4, p. 123.

glaber, *Strombiformis*, Da Costa, 1778, *Historia naturalis testaceorum Britanniae or, the British conchology* .., p. 117.

Strombiformis Da Costa, 1778, *Historia naturalis testaceorum Britanniae or, the British conchology* ..., p. 107.

The following is the reference for the designation of *Turbo perversus* Linnaeus, 1758 as the type species of the nominal genus *Balea* Gray, 1824:

Turton, W. 1831. *A manual of the land and fresh-water shells of the British Islands* ..., p. 7.

The following is the reference for the designation of the neotype of *Strombiformis glaber* Da Costa, 1778:

Warén, A. 1989. *Journal of Conchology*, **33**(4): 220.

OPINION 1719

Xeromunda Monterosato, 1892 (Mollusca, Gastropoda): *Helix candiota* Pfeiffer, 1849 designated as the type species

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Xeromunda* Monterosato, 1892 are hereby set aside and *Helix candiota* Pfeiffer, 1849 is designated as the type species.

(2) The name *Xeromunda* Monterosato, 1892 (gender: feminine), type species by designation under the plenary powers in (1) above *Helix candiota* Pfeiffer, 1849, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *candiota* Pfeiffer, 1849, as published in the binomen *Helix candiota* (specific name of the type species of *Xeromunda* Monterosato, 1892), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2634

An application for the designation of *Helix candiota* Pfeiffer, 1849 as the type species of *Xeromunda* Monterosato, 1892 was received from Profs F. Giusti and G. Manganelli (*Università di Siena, Siena, Italy*) on 7 January 1988. After correspondence the case was published in BZN **49**: 16–18 (March 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 17. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Dupuis abstained.

Heppell commented that nineteenth century authors attributed the name *Helix candiota* to Friwalsky (or Frivalski) who had named specimens he had collected at Candia in Crete. This manuscript name was first made available (under Article 11e of the Code) by Pfeiffer (1849, p. 255) in the synonymy of *Helix turbinata* Jan (cf. para. 3 of the application). For the locality Sicily 'nach Jan' was indicated, but Pfeiffer himself knew only Greek material, sent to him by Forbes from the island of Syra and by Friwalsky (spelt 'Frivaldsky') from Crete. The specimens figured by Pfeiffer as '*H. turbinata*' (pl. 37, figs. 17, 18) must therefore be *H. candiota*. More recent authors, including the present applicants, have attributed *candiota* to Mousson (1854) who was the first to separate this taxon from Jan's *turbinata*. Some of these authors have incorrectly cited the name *candiota* from the publication of Mousson's work, also in 1854, in vol. 3 (pp. 362–402) of *Mittheilungen der Naturforschenden Gesellschaft in Zürich*. In fact this was only pp. 16–54 of the publication as a separate and did not include *H. candiota* (p. 10).

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

candiota, *Helix*, Pfeiffer, 1849, Die Schnirkelschnecken (Gattung *Helix*) in Abbildungen nach der Natur mit Beschreibungen, *in* Küster, H.C. (Ed.), *Systematisches Conchylien-Cabinet von Martini und Chemnitz*, vol. 1, part 12, p. 255. [Pp. 201–288 published in 1849; see Smith, E.A. & England, H.W. 1937. *Journal of the Society for the Bibliography of Natural History*, **1**: 92].

Xeromunda Monterosato, 1892, *Atti della Reale Accademia di Scienze, Lettere e Belle Arti di Palermo*, (3)**2**: 25.

OPINION 1720

Cycloceras M'Coy, 1844 (Mollusca, Nautiloidea): *C. laevigatum* M'Coy, 1844 designated as the type species, and a neotype designated for *C. laevigatum*

Ruling

(1) Under the plenary powers:

(a) all previous fixations of type species for the nominal genus *Cycloceras* M'Coy, 1844 are hereby set aside and *Cycloceras laevigatum* M'Coy, 1844 is designated as the type species;

(b) all previous fixations of type specimens for *Cycloceras laevigatum* M'Coy, 1844 are hereby set aside and specimen no. GSI: F03400 in the Geological Survey of Ireland (figured by Foord, 1897, pl. 5, figs. 1a, 1b) is designated as the neotype.

(2) The name *Cycloceras* M'Coy, 1844 (gender: neuter), type species designated in (1)(a) above *Cycloceras laevigatum* M'Coy, 1844, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *laevigatum* M'Coy, 1844, as published in the binomen *Cycloceras laevigatum* and as defined by the neotype designated in (1)(b) above (specific name of the type species of *Cycloceras* M'Coy, 1844), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2753

An application for the conservation of usage of *Cycloceras* M'Coy, 1844 by the designation of *Cycloceras laevigatum* M'Coy, 1844 as the type species, and the designation of a neotype for *C. laevigatum*, was received from Dr Kathleen Histon (*Trinity College, Dublin, Ireland*) on 12 January 1990. After correspondence the case was published in BZN **48**: 97-99 (June 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that, as mentioned in para. 7 of the application, Croneis (1926) noted that 'the genotype of *Perigrammoceras* is a species which probably should be designated as the genotype of the original *Cycloceras* of M'Coy'. He treated *Perigrammoceras* Foerste, 1924 'as a junior objective synonym of *Cycloceras* M'Coy'. However, *C. laevigatum* M'Coy, 1844 was founded on specimen F.7212 in the National Museum of Ireland (see paras. 1 and 9), whilst *O. laevigatum* sensu Foerste (1924), the basis of *Perigrammoceras*, was based on Foord's specimen F03402 in the Geological Survey of Ireland (paras. 6 and 9).

Croneis's type designation for *Cycloceras* was only tentative and did not refer to *laevigatum* in its original (M'Coy) sense. The designation was therefore invalid and proposal (1) in para. 11 of the application, which sought to set aside all previous type designations for *Cycloceras*, was amended on the voting paper to omit the words 'prior to that by Croneis (1926) of *Cycloceras laevigatum* M'Coy, 1844'.

The specimen proposed as the neotype of *Cycloceras laevigatum* M'Coy (no. GSI: F03400) was that figured by Foord (1897, pl. 5, figs. 1a, 1b) and by Sweet (1964, p. K259, figs. 186 2a, 2b) in the *Treatise on Invertebrate Paleontology*.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 99, with the amendments noted above. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 29: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Cycloceras M'Coy, 1844, *A synopsis of the characters of the Carboniferous Limestone fossils of Ireland*, p. 6.

laevigatum, *Cycloceras*, M'Coy, 1844, *A synopsis of the characters of the Carboniferous Limestone fossils of Ireland*, p. 10.

OPINION 1721

BELEMNITIDAE Owen, 1838 (Mollusca, Coleoidea): ruled to be unavailable; *Belemnites* Lamarck, 1799 and *B. paxillosa* Lamarck, 1801 suppressed

Ruling

(1) Under the plenary powers:

(a) the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(i) the generic name *Belemnites* Lamarck, 1799;

(ii) the specific name *paxillosa* Lamarck, 1801, as published in the binomen *Belemnites paxillosa*;

(b) the name BELEMNITIDAE Owen, 1838 is hereby ruled to be unavailable, the name of its type genus having been suppressed in (1)(a)(i) above.

(2) The name *Passaloteuthis* Lissajous, 1915 (gender: feminine), type species by original designation *Belemnites bruguierianus* d'Orbigny, 1843 (a junior subjective synonym of *Belemnites bisulcatus* Blainville, 1827), is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *bisulcatus* Blainville, 1827, as published in the binomen *Belemnites bisulcatus* (senior subjective synonym of the specific name of *Belemnites bruguierianus* d'Orbigny, 1843, the type species of *Passaloteuthis* Lissajous, 1915), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name PASSALOTEUTHIDIDAE Naef, 1922 (type genus *Passaloteuthis* Lissajous, 1915) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The name *Belemnites* Lamarck, 1799, as suppressed in (1)(a)(i) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(6) The name *paxillosa* Lamarck, 1801, as published in the binomen *Belemnites paxillosa* and as suppressed in (1)(a)(ii) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(7) The name BELEMNITIDAE Owen, 1838, as ruled to be unavailable in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Case 2571

The case was published in its original form in BZN **43**: 355–359 (December 1986). Notice of the case was sent to appropriate journals. Comments were published in **44**: 48 (March 1987), **44**: 194 (September 1987), **45**: 50 (March 1988) and **46**: 267–272 (December 1989); later aspects were set out in BZN **49**: 66–67 (March 1992). The generic name *Belemnites*, first made available by Lamarck in 1799, was not in modern use but the family name BELEMNITIDAE had been extensively used for the taxon for which the name PASSALOTEUTHIDIDAE Naef, 1922 was available. *Passaloteuthis* Lissajous, 1915 was in established use.

In March 1989 the Commission accepted the original application by Drs Doyle and Riegraf, which was supported by palaeontologists, and voted (by 20 for, 3 against) to suppress the names *Belemnites* and *paxillosa* Lamarck, 1801 (p. 104), the

latter being the specific name of the nominal type species. The application also conserved usage of the name BELEMNITIDAE by asking that the type genus be deemed to be *Passaloteuthis*. This was agreed by the majority vote, but in voting against Prof W.D.L. Ride suggested an alternative course for the retention of BELEMNITIDAE: a ruling that *Belemnites* Lamarck, 1799 be redefined and, by use of the Commission's plenary powers, be deemed to be a junior objective synonym of *Passaloteuthis* Lissajous, 1915.

As reported in BZN **46**: 267–272, following this vote extensive notes on the case were distributed to palaeontologists and replies were received supporting the originally proposed suppression of the name *Belemnites* but conservation of BELEMNITIDAE (seven for, one against). In September 1990 the Commission was asked either (a) to confirm its previous acceptance of the Doyle & Riegraf application or (b) to define *Belemnites* as available in the taxonomic sense of *Passaloteuthis* and to rule that the latter name be treated as though it were the senior synonym; both courses included the suppression of *paxillosa*. The voting papers recorded an eighth palaeontologist in support of course (a).

Thirteen Commissioners voted in favour of each course. In the light of this Drs Doyle and Riegraf reiterated that any retention of *Belemnites* as an available generic name would be unacceptably confusing to belemnite workers; recognizing the nomenclatural problems they proposed that BELEMNITIDAE should be abandoned as a family-group name and be replaced by PASSALOTEUTHIDIDAE, which had already had some use at family and superfamily ranks. The proposals on BZN **49**: 67 were published accordingly; no comments were received subsequently.

Proposal (1)(4) on BZN **49**: 67 recorded that the type species of *Passaloteuthis* was *Belemnites bruguierianus* d'Orbigny, 1843 (p. 84, pl. 7, figs. 1–5) by original designation. As noted by Doyle (1990, p. 19), *B. bruguierianus* is a junior subjective synonym of *B. bisulcatus* Blainville, 1827 (p. 79, pl. 2, fig. 7).

Doyle, P. 1990. The British Toarcian (Lower Jurassic) belemnites. Part 1. *Palaeontographical Society (Monographs)*, **144**: 1–49. (Publication no. 584).

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 67. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 22: Bayer, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Štys, Thompson, Uéno, Willink

Negative votes — 7: Bock, Dupuis, Heppell, Savage, Schuster, Starobogatov and Trjapitzin.

Dupuis commented that, contrary to the advice of some research workers in palaeomalacology but for the sake of non-specialists, he would have preferred to retain the names *Belemnites* and BELEMNITIDAE. Heppell voted against because he considered that improper pressure had been put on the applicants and other palaeontologists. He said that the second Commission vote (in September 1990) had failed to give any majority and the case should have been taken as resolved by the original vote in March 1989; an Opinion should have been issued accordingly. Decisions of the Commission should not be set aside or modified because of pressure

from any dissenting individual or group. (*Editorial note*. Following the second vote, and again in March 1993, Dr Doyle was consulted as to the current views of belemnite specialists. He has stated that the important point was the unequivocal suppression of the generic name *Belemnites*, and that the section on Coleoidea of the *Treatise on Invertebrate Paleontology* at present in preparation will use PASSALOTEUTHIDIDAE and not BELEMNITIDAE; Russian workers had already adopted PASSALOTEUTHIDIDAE. It should be emphasized that the Commission ruling in no way affects the propriety of vernacular terms such as 'belemnite' or 'belemnitid', or the use of suprafamily-group taxonomic names (e.g. the Order name Belemnitida Zittel, 1895)).

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Belemnites Lamarck, 1799, *Mémoires de la Société d'Histoire Naturelle de Paris*, **1**: 81.

BELEMNITIDAE Owen, 1838, *Transactions of the Zoological Society of London*, **2**(2): 127.

bisulcatus, *Belemnites*, Blainville, 1827, *Mémoire sur les Belemnites, considérées zoologiquement et géologiquement*, p. 79.

PASSALOTEUTHIDIDAE Naef, 1922, *Die fossilen Tintenfische ...*, p. 230.

Passaloteuthis Lissajous, 1915, *Bulletin de la Société d'Histoire Naturelle de Mâcon*, **1915**(1): 9.

paxillosa, *Belemnites*, Lamarck, 1801, *Système des animaux sans vertèbres*, p. 104.

OPINION 1722

Acrolocha Thomson, 1858 (Insecta, Coleoptera): conserved, and *Coprophilus* Latreille, 1829: *Staphylinus striatulus* Fabricius, 1792 designated as the type species

Ruling

(1) Under the plenary powers:

(a) the generic name *Elonium* Leach in Samouelle, 1819 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(b) all previous fixations of type species for *Coprophilus* Latreille, 1829 are hereby set aside and *Staphylinus striatulus* Fabricius, 1792 is designated as the type species.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Acrolocha* Thomson, 1858 (gender: feminine), type species by original designation *Omalium striatum* Gravenhorst, 1802;

(b) *Coprophilus* Latreille, 1829 (gender: masculine), type species by designation under the plenary powers in (1)(b) above *Staphylinus striatulus* Fabricius, 1792.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *striatum* Gravenhorst, 1802, as published in the binomen *Omalium striatum* (specific name of the type species of *Acrolocha* Thomson, 1858);

(b) *striatulus* Fabricius, 1792, as published in the binomen *Staphylinus striatulus* (specific name of the type species of *Coprophilus* Latreille, 1829).

(4) The name *Elonium* Leach in Samouelle, 1819, as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2764

An application for the designation of *Staphylinus striatulus* Fabricius, 1792 as the type species of *Coprophilus* Latreille, 1829, and the conservation of *Acrolocha* Thomson, 1858, was received from Dr Margaret K. Thayer (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*) on 26 February 1990. After correspondence the case was published in BZN **49**: 22–27 (March 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the question had been raised as to whether the name *Elonium*, which appeared on pp. 175 and 468 of Samouelle's work (para. 1 of the application), should be attributed to 'Leach in Samouelle' under Article 50a of the Code, and as given in nomenclators such as Sherborn and Neave, or to 'Samouelle'. The entry (p. 175) reads: 'The following species may be considered as types of as many genera: Genus *Elonium*. Leach. *Omalium striatum* ...'. On p. 172 Samouelle wrote: 'To my kind and valuable friend Dr. Leach I am indebted for the above and following notice of new genera, as lately established by the celebrated entomologists whose names are affixed'. It therefore seems that the authorship 'Leach in Samouelle' is appropriate.

It was also noted that *Omalium striatum* was the only species included in *Elonium*, but an author for the specific name was not cited (para. 1 of the application). However, in a section of the work (pp. 357–444) called 'The Entomologist's Calendar, exhibiting the time of appearance and habitation of near three thousand species of British insects', *O. striatum* was ascribed (p. 375) to Gyllenhall (1810, p. 231), who referred to Gravenhorst (1802).

Additional reference

Gyllenhall, L. 1810. *Insecta Svecica. Classis I. Coleoptera sive Eleuterata*, vol. 1, part 2.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 24–25. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Bouchet and Schuster.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Acrolocha Thomson, 1858, *Öfversigt af Kungliga Vetenskapsakadamiens Förhandlingar*, **15**: 38.

Coprophilus Latreille, 1829, *Le règne animal* ... (Ed. Cuvier, G.L.C.F.D.), Ed. 2, vol. 4, p. 439.

Elonium Leach, 1819, *in* Samouelle, G., *The entomologist's useful compendium*, p. 175.

striatulus, *Staphylinus*, Fabricius, 1792, *Entomologia systematica emendata et aucta* ..., vol. 1, part 2, p. 525.

striatum, *Omalium*, Gravenhorst, 1802, *Coleoptera microptera Brunsvicensia nec non exoticorum quotquot exstant in collectionibus entomologorum Brunsvicensium in genera, familiae et species distribuit*, p. 119.

OPINION 1723

Carabus mollis Marsham, 1802 (currently *Calathus mollis*; Insecta, Coleoptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *mollis* Ström, 1768, as published in the binomen *Carabus mollis*, and all uses of the name *Carabus mollis* prior to that by Marsham, 1802, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *mollis* Marsham, 1802, as published in the binomen *Carabus mollis* and as defined by the lectotype designated by Aukema & Luff (1992), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *mollis* Ström, 1768, as published in the binomen *Carabus mollis* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2782

An application for the conservation of the specific name of *Carabus mollis* Marsham, 1802 was received from Drs B. Aukema (*Plant Protection Service, Wageningen, The Netherlands*) and M.L. Luff (*University of Newcastle upon Tyne, U.K.*) on 9 July 1990. After correspondence the case was published in BZN **49**: 28–29 (March 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the lectotype designation for *Calathus mollis* (Marsham, 1802) dated from its publication by Aukema & Luff (1992) in BZN **49**: 28 and not from 'Aukema 1990' as recorded on the specimen label (para. 2 of the application).

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 28–29. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes – 29: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

mollis, *Carabus*, Marsham, 1802, *Coleoptera Britannica*....., vol. 2, p. 456.

mollis, *Carabus*, Ström, 1768, *Kongelige Norske Videnskabers Selskabs Skrifter*, **4**: 330.

The following is the reference for the designation of the lectotype of *Carabus mollis* Marsham, 1802:

Aukema, B. & Luff, M.L. 1992. BZN **49**: 28.

OPINION 1724

Helophorus Fabricius, 1775 (Insecta, Coleoptera): conserved as correct original spelling

Ruling

(1) Under the plenary powers the correct original spelling of the generic name *Elophorus* Fabricius, 1775 is hereby deemed to be *Helophorus*.

(2) The name *Helophorus* Fabricius, 1775 (gender: masculine), type species by subsequent designation by Latreille (1810) *Silpha aquatica* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology, spelling ruled in (1) above.

(3) The name *aquatica* Linnaeus, 1758, as published in the binomen *Silpha aquatica* (specific name of the type species of *Helophorus* Fabricius, 1775), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Elophorus* Fabricius, 1775 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (ruled in (1) above to be an incorrect original spelling).

History of Case 2796

An application for the conservation of the spelling of *Helophorus* Fabricius, 1775 was received from Dr R.B. Angus (*Royal Holloway and Bedford New College, Egham, Surrey, U.K.*) on 18 October 1990. After correspondence the case was published in BZN **49**: 30–31 (March 1992). Notice of the case was sent to appropriate journals.

Comments in support from Drs A. Smetana (*Centre for Land and Biological Resources Research, Agriculture Canada, Ottawa, Canada*), G.N. Foster (*The Balfour-Browne Club, Ayr, Scotland, U.K.*), Alfred F. Newton Jr. (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*), Paul J. Spangler (*National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.*), D.T. Bilton (*Institutionen för Genetik, Uppsala Universitet, Sweden*), Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*) and Prof J.A. Owen (*Epsom, Surrey, U.K.*) were published in BZN **49**: 230–232 (September 1992).

It was noted on the voting paper that a further comment in support was received from Dr Franz Hebauer (*Institüt für Zoologie der Universität, Kassel, Germany*). A comment from Dr Michael Hansen (*Zoologisk Museum, Copenhagen, Denmark*), received during the voting period, noted: 'The spelling *Helophorus* is now being almost universally used, and has been used in most papers during this century (and this includes hundreds of papers) and all major treatments within the last decades. Since the genus is often referred to it is desirable to get the correct spelling settled'.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 31. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Štys.

Voting for, Heppell commented that the spelling *Helophorus* was that originally used for the erection of a family-group name. Voting against, Štys did not consider that the Commission should accept the modern practice of using *Helophorus*: at least since Chiesa (1959) and McCorkle (1965) it had been well known that the original spelling was *Elophorus*.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

aquatica, Silpha, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 362.

Elophorus Fabricius, 1775, *Systema Entomologiae*, p. 66 (an incorrect original spelling of *Helophorus*).

Helophorus Fabricius, 1775, *Systema Entomologiae*, p. 66 (incorrectly spelled as *Elophorus*).

OPINION 1725

Meladema Laporte, 1835 (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Scutopterus* Dejean, 1833 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Meladema* Laporte, 1835 (gender: feminine), type species by monotypy *Meladema coriacea* Laporte, 1835, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *coriacea* Laporte, 1835, as published in the binomen *Meladema coriacea* (specific name of the type species of *Meladema* Laporte, 1835) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Scutopterus* Dejean, 1833, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2776

An application for the conservation of *Meladema* Laporte, 1835 was received from Dr Anders N. Nilsson (*University of Umeå, Umeå, Sweden*) on 1 June 1990. After correspondence the case was published in BZN **49**: 32–34 (March 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the application had the support of Dr Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*).

It was also noted that, since Sharp's (1882) work, *Dytiscus lanio* Fabricius, 1775 had been included in *Meladema* Laporte, 1835 (paras. 4 and 5 of the application) and under the Code *Meladema* was a junior subjective synonym of *Scutopterus* Dejean, 1833. However, Nilsson, Roughley & Brancucci (1989, p. 314) had commented: 'The synonymy of *Meladema* Laporte and *Scutopterus* Dejean follows from our fixation of *Dytiscus lanio* Fabricius, 1775, as the type species of *Scutopterus*. This case should be referred to the Commission for a conservation of *Meladema* Laporte. To make this possible *Scutopterus* Dejean should be suppressed as an unused senior synonym'.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 33. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 3: Bouchet, Cogger and Dupuis.

Dupuis commented that since *Meladema* and *Scutopterus* were subjective synonyms he would have preferred *Meladema* to be given precedence over *Scutopterus* rather than suppressing the latter name.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

coriacea, *Meladema*, Laporte, 1835, *Études entomologiques, ou description d'insectes nouveaux; et observations sur la synonymie*, part 1, p. 98.

Meladema Laporte, 1835, *Études entomologiques, ou description d'insectes nouveaux; et observations sur la synonymie*, part 1, p. 98.

Scutopterus Dejean, 1833, *Catalogue des coléoptères de la collection de M. le Comte Dejean*, Ed. 2, part 1, p. 54.

OPINION 1726

Mycetoporus Mannerheim, 1831 (Insecta, Coleoptera): *Tachinus punctus* Gravenhorst, 1806 designated as the type species; *Ischnosoma* Stephens, 1829 conserved; and *Mycetoporus* given precedence over *Ischnosoma*

Ruling

(1) Under the plenary powers:

(a) the generic name *Ischnosoma* Cuvier, 1829, and all uses of the name *Ischnosoma* prior to *Ischnosoma* Stephens, 1829, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;

(b) all fixations of type species for the nominal genus *Mycetoporus* Mannerheim, 1831 prior to the designation by Thomson (1859) of *Tachinus punctus* Gravenhorst, 1806 are hereby set aside.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Mycetoporus* Mannerheim, 1831 (gender: masculine), type species by subsequent designation by Thomson (1859) *Tachinus punctus* Gravenhorst, 1806, as ruled in (1)(b) above, with the endorsement that it is to be given precedence over *Ischnosoma* Stephens, 1829 whenever the two names are considered to be synonyms;

(b) *Ischnosoma* Stephens, 1829 (gender: neuter), type species by subsequent designation by Thomson (1859) *Tachinus splendidus* Gravenhorst, 1806, with the endorsement that it is not to be given priority over *Mycetoporus* Mannerheim, 1831 whenever the two names are considered to be synonyms.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *punctus* Gravenhorst, 1806, as published in the binomen *Tachinus punctus* (specific name of the type species of *Mycetoporus* Mannerheim, 1831);

(b) *splendidus* Gravenhorst, 1806, as published in the binomen *Tachinus splendidus* (specific name of the type species of *Ischnosoma* Stephens, 1829).

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Ischnosoma* Cuvier, 1829 (Osteichthyes), as suppressed in (1)(a) above;

(b) *Leichotes* Gistl, 1834 (a junior objective synonym of *Ischnosoma* Stephens, 1829);

(c) *Myteroxis* Gozis, 1886 (a junior objective synonym of *Ischnosoma* Stephens, 1829);

(d) *Ischnosomata* Strand, 1935 (a junior objective synonym of *Ischnosoma* Stephens, 1829);

(e) *Schinomosa* Tottenham, 1939 (a junior objective synonym of *Mycetoporus* Mannerheim, 1831).

History of Case 2733

An application for the conservation of *Mycetoporus* Mannerheim, 1831 by the designation of *Tachinus punctus* Gravenhorst, 1806 as the type species, for the

conservation of *Ischnosoma* Stephens, [June] 1829, and for *Mycetoporus* to be given precedence over *Ischnosoma* was received from Dr J.M. Campbell (*Biosystematics Research Centre, Agriculture Canada, Ottawa, Ontario, Canada*) on 24 July 1989. After correspondence the case was published in BZN **49**: 35–40 (March 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the application had the support of Dr Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*).

It was also noted that under the Code *Tachinus splendidus* Gravenhorst, 1806 was the type species of both *Ischnosoma* Stephens, 1829 and *Mycetoporus* Mannerheim, 1831 (paras. 5 and 6 of the application). Thus, Blackwelder's (1952) designation of *T. splendidus* as the type species of *Leichotes* Gistl, 1834 rendered the latter name a junior objective synonym of *Ischnosoma* and *Mycetoporus* (not subjective as noted in para. 4 of the application). *Myteroxis* Gozis, 1886 (type species by monotypy *T. splendidus*) was also a junior objective synonym of both *Ischnosoma* and *Mycetoporus* (cf. para. 7 of the application). Approval of proposal (1)(b) in para. 13 (BZN **49**: 37), i.e. the designation of *T. punctus* as the type species of *Mycetoporus* following Thomson's (1859) designation and subsequent usage, would allow *Leichotes* and *Myteroxis* to be placed on the Official Index as junior objective synonyms of *Ischnosoma* (and not as stated in proposals (4)(b) and (4)(c)).

In para. 8 of the application it was stated that the fish generic name *Ischnosoma* Cuvier, [31 March] 1829 was available under Article 11e of the Code; the voting paper noted that although this may be questioned the name was certainly made available between May and July 1829 (see BZN **46**: 130, para. 1). In Opinion 1621 (BZN **47**: 239–240) the name *Osteoglossum* Cuvier, 1829 was placed on the Official List but the synonymous *Ischnosoma* was not suppressed. Suppression was now appropriate for the conservation of *Ischnosoma* Stephens.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 37–38, with the amendments noted above. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 4: Bouchet, Cogger, Lehtinen and Thompson.

No vote was received from Ride.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Ischnosoma Cuvier, 1829, *Le règne animal distribué d'après son organisation* ..., Ed. 2, vol. 2, p. 328.

Ischnosoma Stephens, 1829, *The nomenclature of British insects* ..., p. 22

Ischnosomata Strand, 1935, *Folia Zoologica Hydrobiologica*, **7**(2): 293.

Leichotes Gistl, 1834, *Die Insecten-Doubletten aus der Sammlung des Herrn Grafen Rudolph von Jenison Walworth zu Regensburg*, no. 1, p. 9.

Mycetoporus Mannerheim, 1831, *Mémoires présentés à l'Académie Impériale des Sciences de St.-Pétersbourg par Divers Savans, et lus dans ses Assemblées*, **1**(5): 476.

Myteroxis Gozis, 1886, *Recherche de l'espèce typique de quelques anciens genres. Rectifications synonymiques et notes diverses*, p. 14.
punctus, *Tachinus*, Gravenhorst, 1806, *Monographia coleopterorum micropterorum*, p. 27.
Schinomosa Tottenham, 1939, *Proceedings of the Royal Entomological Society of London*, (B)**8**(12): 226.
splendidus, *Tachinus*, Gravenhorst, 1806, *Monographia coleopterorum micropterorum*, p. 24.

The following is the reference for the designation of *Tachinus punctus* Gravenhorst, 1806 as the type species of the nominal genus *Mycetoporus* Mannerheim, 1831:
Thomson, C.G. 1859. *Skandinaviens Coleoptera, synoptiskt bearbetade*, vol. 1, p. 47.

OPINION 1727

Schizopus Le Conte, 1858 (Insecta, Coleoptera): placed on the Official List of Generic Names

Ruling

(1) The name *Schizopus* Le Conte, [April] 1858 (gender: masculine), type species by monotypy *Schizopus laetus* Le Conte, 1858, is hereby placed on the Official List of Generic Names in Zoology.

(2) The name *laetus* Le Conte, 1858, as published in the binomen *Schizopus laetus* (specific name of the type species of *Schizopus* Le Conte, 1858), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *Schizopus* Claparède & Lachmann, [December] 1858 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior homonym of *Schizopus* Le Conte, [April] 1858).

History of Case 2773

An application for the conservation of *Schizopus* Le Conte, 1858 was received from Prof G.H. Nelson (*College of Osteopathic Medicine of the Pacific, Pomona, California, U.S.A.*) on 14 May 1990. After correspondence the case was published in BZN **48**: 305–307 (December 1991). Notice of the case was sent to appropriate journals. Comments by Prof L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) and Dr V. Mahnert (*Muséum d'Histoire Naturelle, Genève, Switzerland*), published in BZN **49**: 232–233 (September 1992), gave the dates of publication of the (1858) works by Le Conte and Claparède & Lachmann as April and December respectively.

It was noted on the voting paper that since *Schizopus* Le Conte was the prior name there was no need for Commission action to conserve it. Proposal (4)(1) on BZN **48**: 305–306 was therefore withdrawn. The Commission was asked only to place *Schizopus*, and the name of its type species *S. laetus*, both of Le Conte ([April] 1858), on appropriate Official Lists, and *Schizopus* Claparède & Lachmann, [December] 1858 (a junior homonym) on the Official Index. Use of the plenary powers was not required and a simple majority vote would suffice.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 306, with proposal (4)(1) withdrawn, as noted above. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Heppell and Štys.

Lehtinen abstained.

Heppell, Lehtinen and Štys commented that, in their view, there was no need to place the senior homonym *Schizopus* Le Conte on the Official List. (*Editorial*

note. This is the most effective way of recording the facts which came to light as a result of the submission of the case to the Commission).

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

laetus, *Schizopus*, Le Conte, [April] 1858, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **1858**: 70.

Schizopus Claparède & Lachmann, [December] 1858, *Mémoires de l'Institut National Génevois*, **5**: 182.

Schizopus Le Conte, [April] 1858, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **1858**: 70.

OPINION 1728

Planoplatyscelis Kaszab, 1940 (Insecta, Coleoptera): *Platyscelis margelanica* Kraatz, 1882 designated as the type species

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal subgenus *Planoplatyscelis* Kaszab, 1940 are hereby set aside and *Platyscelis margelanica* Kraatz, 1882 is designated as the type species.

(2) The name *Planoplatyscelis* Kaszab, 1940 (gender: feminine), type species by designation under the plenary powers in (1) above, *Platyscelis margelanica* Kraatz, 1882, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *margelanica* Kraatz, 1882, as published in the binomen *Platyscelis margelanica* (specific name of the type species of *Planoplatyscelis* Kaszab, 1940) is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2731

An application for the designation of *Platyscelis margelanica* Kraatz, 1882 as the type species of *Planoplatyscelis* Kaszab, 1940 was received from Dr L.V. Egorov (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*) on 3 July 1989. After correspondence the case was published in BZN **48**: 300–301 (December 1991). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 300–301. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 3: Dupuis, Halvorsen and Thompson.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

margelanica, *Platyscelis*, Kraatz, 1882, *Deutsche Entomologische Zeitschrift*, **26**(1): 84.

Planoplatyscelis Kaszab, 1940, *Mitteilungen der Münchner Entomologischen Gesellschaft*, **30**(1): 206.

OPINION 1729

Platyscelis Latreille, 1818 (Insecta, Coleoptera): *Tenebrio hypolithus* Pallas, 1781 designated as the type species, so conserving *Oodescelis* Motschulsky, 1845

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Platyscelis* Latreille, 1818 are hereby set aside and *Tenebrio hypolithus* Pallas, 1781 is designated as the type species.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Platyscelis* Latreille, 1818 (gender: feminine), type species by designation under the plenary powers in (1) above *Tenebrio hypolithus* Pallas, 1781;

(b) *Oodescelis* Motschulsky, 1845 (gender: feminine), type species by subsequent designation by Kaszab (1940) *Blaps polita* Sturm, 1807.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *hypolithus* Pallas, 1781, as published in the binomen *Tenebrio hypolithus* (specific name of the type species of *Platyscelis* Latreille, 1818);

(b) *polita* Sturm, 1807, as published in the binomen *Blaps polita* (specific name of the type species of *Oodescelis* Motschulsky, 1845).

History of Case 2780

An application for the designation of *Tenebrio hypolithus* Pallas, 1781 as the type species of *Platyscelis* Latreille, 1818, so conserving *Oodescelis* Motschulsky, 1845, was received from Dr L.V. Egorov (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*) on 13 July 1990. After correspondence the case was published in BZN **48**: 302–304 (December 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the additional references held by the Commission Secretariat (para. 4 of the application) demonstrating usage of the names *Platyscelis* and *Oodescelis* were all published in the last 35 years and included works by 12 different authors.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 303. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Cogger, Corliss, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Dupuis and Heppell.

Bouchet abstained.

Heppell and Ride commented that since *Tenebrio hypolithus* Pallas, 1781 was not an originally included species of *Platyscelis* Latreille, 1818, Guérin's (1828) designation (para. 1 of the application) was invalid (cf. proposal (1) in para. 5). This point

has been incorporated in the present Opinion. Bouchet and Heppell each commented that it seemed inappropriate to retain the date and authorship of a monotypic genus when neither the original description nor the originally included species were in accord with the current usage of the taxon; they would have preferred to suppress *Platyscelis* Latreille, 1818 and to attribute the name to Dejean (1821). *T. hypolithus* would then have been the type species by monotypy.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

hypolithus, Tenebrio, Pallas, 1781, *Icones insectorum praesertim Russiae Siberiaeque peculiarium, quae collegit et descriptionibus illustravit*, p. 44.

Oodescelis Motschulsky, 1845, *Bulletin de la Société Impériale des Sciences des Naturalistes de Moscou*, **18**(1): 76.

Platyscelis Latreille, 1818, *in*: *Nouveau Dictionnaire d'Histoire naturelle*, Ed. 2, vol. 27, p. 23.

polita, Blaps, Sturm, 1807, *Deutschlands Fauna in Abbildungen nach der Natur mit Beschreibungen*, part 5.2, p. 208.

The following is the reference for the designation of *Blaps polita* Sturm, 1807 as the type species of the nominal genus *Oodescelis* Motschulsky, 1845:

Kaszab, Z. 1940. *Mitteilungen der Münchner Entomologischen Gesellschaft*, **30**(3): 937.

OPINION 1730

Graptolithus clintonensis (currently *Monograptus clintonensis*; Graptolithina): specific name attributed to Hall, 1852 and a lectotpye designated

Ruling

(1) Under the plenary powers the specific name *clintonensis* Hall, 1843, as published in the binomen *Graptolites clintonensis*, and all uses of that name prior to the publication of *Graptolithus clintonensis* Hall, 1852, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *clintonensis* Hall, 1852, as published in the binomen *Graptolithus clintonensis* and as defined by specimen no. 30951 in the American Museum of Natural History, New York, U.S.A. (figured by Hall, 1852, pl. A17, fig. 1a) hereby designated as the lectotype, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *clintonensis* Hall, 1843, as published in the binomen *Graptolites clintonensis* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2815

An application to conserve the specific name of *Monograptus clintonensis* in its accepted usage by attributing it to Hall (1852) was received from Dr D.K. Loydell (*Institute of Earth Studies, University College of Wales, Aberystwyth, Wales*) on 12 April 1991. After correspondence the case was published in BZN **49**: 43–45 (March 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that an alternative approach would have been the designation of a neotype in the 1852 sense of *clintonensis* for the nominal species *Graptolites clintonensis* Hall, 1843. However, in his 1843 publication Hall based this species on his illustrated specimen (which is of *Monograptus priodon* Bronn, 1835; para. 1 of the application) and Dr Loydell favoured the published approach, i.e. attribution of the name to Hall (1852) where the species was described in some detail and the proposed lectotype was figured.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 44. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 22: Bayer, Bock, Cocks, Corliss, Hahn, Halvorsen, Heppell, Kabata, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 6: Bouchet, Cogger, Holthuis, Kraus, Lehtinen and Thompson.

Dupuis abstained.

Lehtinen commented that since the original reference specimen of *Graptolites clintonensis* Hall, 1843 existed there was no reason to change the concept of the species because of subsequent errors by the original author. Thompson commented

that insufficient justification had been given for the suppression of *clintonensis* Hall, 1843; he considered that the specimen selected as the lectotype of *clintonensis* Hall, 1852 could have been designated as the neotype of *clintonensis* Hall, 1843. Kraus commented that inadequate information had been given on the usage and importance of *clintonensis* Hall, 1852 and questioned whether names in current use would be affected if priority were followed; in addition, the application had not been supported by other specialists in the field. Dupuis abstained because a European senior synonym of *clintonensis* Hall, 1852 might be found which would have correlation implications.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

clintonensis, *Graptolites*, Hall, 1843, *Geology of New York. Part IV. Survey of the Fourth Geological District*, p. 74.

clintonensis, *Graptolithus*, Hall, 1852, *Palaeontology of New York. Volume II, containing descriptions of the organic remains of the Lower Middle Division of the New York System*, p. 39.

OPINION 1731

Monograptus crenulatus (currently *Monoclimacis crenulata*; Graptolithina): specific name attributed to Elles & Wood, 1911, and a lectotype designated

Ruling

(1) Under the plenary powers the specific name *crenulatus* Törnquist, 1881, as published in the binomen *Monograptus crenulatus*, and all uses of that name prior to its publication by Elles & Wood (1911), are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *crenulatus* Elles & Wood, 1911, as published in the trinomen *Monograptus vomerinus crenulatus* and as defined by specimen no. BU 1555 in Birmingham University, Birmingham, U.K. (figured by Elles & Wood, 1911, text fig. 278a) hereby designated as the lectotype, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *crenulatus* Törnquist, 1881, as published in the binomen *Monograptus crenulatus* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2826

An application to conserve the specific name of *Monograptus crenulatus* in its accepted usage by attributing it to Elles & Wood (1911) was received from Drs D.K. Loydell (*Institute of Earth Studies, University College of Wales, Aberystwyth, Wales*), E.E. Bull (*Grant Institute of Geology, University of Edinburgh, Edinburgh, Scotland*) and P. Štorch (*Geological Survey, Praha, Czech Republic*) on 15 July 1991. After correspondence the case was published in BZN **49**: 46–48 (March 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 47. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 4: Holthuis, Lehtinen, Macpherson and Thompson.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

crenulatus, *Monograptus*, Törnquist, 1881, *Geologiska Föreningens i Stockholm Förhandlingar*, **5**: 438.

crenulatus, *Monograptus vomerinus*, Elles & Wood, 1911, *Palaeontographical Society (Monograph)*, p. 412.

OPINION 1732

Scylliorhinus atlanticus Koefoed, 1927 (currently *Apristurus atlanticus*; Chondrichthyes, Carcharhiniformes): specific name conserved

Ruling

(1) Under the plenary powers the specific name *spinacipellitum* Vaillant, 1888, as published in the binomen *Scyllium? spinacipellitum*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *atlanticus* Koefoed, 1927, as published in the binomen *Scylliorhinus atlanticus*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *spinacipellitum* Vaillant, 1888, as published in the binomen *Scyllium? spinacipellitum* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2797

An application for the conservation of the specific name of *Scylliorhinus atlanticus* Koefoed, 1927 was received from Prof K. Nakaya (*Hokkaido University, Hokkaido, Japan*) and Dr B. Séret (*Muséum National d'Histoire Naturelle, Paris, France*) on 22 October 1990. After correspondence the case was published in BZN **49**: 49–51 (March 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 50. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 24: Bock, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 4: Bayer, Bouchet, Lehtinen and Macpherson.

Dupuis abstained.

Bayer commented that since the taxonomy of the catsharks was still unsettled the suppression of *Scyllium spinacipellitum* was inadvisable. Dupuis abstained because insufficient information had been given on other Atlantic catsharks and on the status of the genus.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

atlanticus, *Scylliorhinus*, Koefoed, 1927, *Report of the Scientific Results of Michael Sars North Atlantic Deepsea Expedition 1910*, **4**(1): 18.

spinacipellitum, *Scyllium?*, Vaillant, 1888, *in* Masson, G. (Ed.), *Expéditions scientifiques du* Travailleur *et du* Talisman *pendant les années 1880–83*, p. 60.

OPINION 1733

Amphiuma tridactylum Cuvier, 1827 (Amphibia, Caudata): specific name conserved

Ruling

(1) Under the plenary powers the specific name *quadrupeda* Custis, 1807, as published in the binomen *Syren quadrupeda*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *tridactylum* Cuvier, 1827, as published in the binomen *Amphiuma tridactylum*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *quadrupeda* Custis, 1807, as published in the binomen *Syren quadrupeda* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2771

An application for the conservation of the specific name of *Amphiuma tridactylum* Cuvier, 1827 was received from Prof Harold A. Dundee (*Tulane University, New Orleans, Louisiana, U.S.A.*) on 27 April 1990. After correspondence the case was published in BZN **48**: 238–239 (September 1991). Notice of the case was sent to appropriate journals. A comment in support from Prof Hobart M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*) was published in BZN **49**: 151 (June 1992).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 239. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Macpherson.

No vote was received from Heppell.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

quadrupeda, *Syren*, Custis, 1807, *in* King, N. (Ed.), *An account of the Red River, in Louisiana, drawn up from the returns of Messrs. Freeman & Custis, to the War Office of the United States, who explored the same, in the year 1806*, p. 60.

tridactylum, *Amphiuma*, Cuvier, 1827, *Mémoires du Muséum d'Histoire Naturelle*, **14**: 7.

OPINION 1734

Ichthyosaurus trigonus Owen, 1840 (currently *Macropterygius trigonus*; Reptilia, Ichthyopterygia): neotype replaced by rediscovered holotype

Ruling

(1) It is hereby confirmed that Lydekker (1889) did not validly designate a neotype of *Ichthyosaurus trigonus* Owen, 1840.

(2) The name *Macropterygius* von Huene, 1922 (gender: masculine), type species by subsequent designation by von Huene (1923) *Ichthyosaurus trigonus* Owen, 1840, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *trigonus* Owen, 1840, as published in the binomen *Ichthyosaurus trigonus* and as defined by the holotype (specimen no. ANSP 10124 in the Vertebrate Paleontology collection of the Academy of Natural Sciences, Philadelphia, U.S.A., figured by Spamer, Bogan & Torrens, 1989) (specific name of the type species of *Macropterygius* von Huene, 1922), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2779

An application to replace the putative neotype of *Ichthyosaurus trigonus* Owen, 1840 by the rediscovered holotype was received from Drs Earle E. Spamer (*Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*) and Hugh S. Torrens (*University of Keele, Keele, Staffordshire, U.K.*) on 13 July 1990. After correspondence the case was published in BZN **48**: 240–242 (September 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that Lydekker (1889, p. 22) had proposed that three vertebrae (cervical, dorsal and caudal) figured by Phillips (1871) could conveniently be taken as 'representing the types' of *Ichthyosaurus trigonus*. However, the provenance of these vertebrae was unknown and there was no evidence that they came from the same individual or even locality (para. 2 of the application). The selection of such a suite as 'the types' did not constitute a valid neotype designation (cf. para. 3). Although this was not referred to in the application, Lydekker (p. 24) used the expression 'which may be taken as the type' when comparing Phillips's figured cervical vertebra with another example, but the context suggests that he was merely referring to it as being the 'type' (i.e. the figured) cervical specimen and not selecting this vertebra as the single name-bearer for the species.

Lydekker's statements did not constitute a neotype designation and the Commission was asked simply to confirm this in an amended version of Proposal (1) on BZN **48**: 242. It was also proposed, in accord with usual practice, that *Macropterygius* von Huene, 1922 be placed on the Official List of Generic Names; von Huene (1923, p. 465) had designated *Ichthyosaurus trigonus* Owen, 1840 as the type species (para. 5 of the application).

Decision of the Commission

On 1 September 1992 the members of the Commission were invited to vote on Proposal (2) on BZN **48**: 242, together with amended Proposal (1) and the addition

noted above. At the close of the voting period on 1 December 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis (in part), Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Heppell.

Dupuis abstained from voting on the amended Proposal (1) because the neotype concept was unknown at the time of Lydekker (1889) who, in any case, had not (in terms of the current Code) validly designated a neotype for *Macropterygius trigonus*. Štys commented that in his view there had been no need for Commission action. Ride commented that Lydekker's action failed to meet the qualifying conditions of Article 75 of the Code and therefore the holotype was not threatened in any way by his suggestion that Phillips's (1871) vertebral specimens be treated as 'types'. It appeared that no nomenclatural instability was caused by rediscovery of the holotype.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Macropterygius von Huene, 1922, *Monographien zur Geologie und Palaeontologie*, **1**: 98.

trigonus, *Ichthyosaurus*, Owen, 1840, *Report of the 9th Meeting of the British Association for the Advancement of Science, 1839*, **8**: 124.

OPINION 1735

Anniella pulchra Gray, 1852 (Reptilia, Squamata): neotype designated

Ruling

(1) Under the plenary powers all previous fixations of type specimens for the nominal species *Anniella pulchra* Gray, 1852 are hereby set aside and specimen no. 64656 in the Museum of Vertebrate Zoology, University of California, Berkeley, U.S.A. is designated as the neotype.

(2) The name *Anniella* Gray, 1852 (gender: feminine), type species by monotypy *Anniella pulchra* Gray, 1852, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *pulchra* Gray, 1852, as published in the binomen *Anniella pulchra* and as defined by the neotype designated in (1) above (specific name of the type species of *Anniella* Gray, 1852), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *argentea* Hunt, 1983, as published in the trinomen *Anniella nigra argentea*, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology (a junior objective synonym of *Anniella pulchra* Gray, 1852).

History of Case 2552

An application to conserve the accepted usage of the specific name of *Anniella pulchra* Gray, 1852 by the designation of a neotype was received from Dr R.W. Murphy (*Royal Ontario Museum, Toronto, Ontario, Canada*) and Prof H.M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*) on 16 January 1986. After correspondence the case was published in BZN **48**: 316–318 (December 1991). Notice of the case was sent to appropriate journals.

Comments in support from Profs Royce E. Ballinger (*University of Nebraska, Lincoln, U.S.A.*), Lauren E. Brown (*Illinois State University, Normal, U.S.A.*), Wilmer W. Tanner (*Brigham Young University, Provo, Utah, U.S.A.*), Robert C. Stebbins (*University of California, Berkeley, U.S.A.*), John B. Iverson (*Earlham College, Richmond, Indiana, U.S.A.*) and David Chiszar (*University of Colorado, Boulder, U.S.A.*) were published in BZN **49**: 155–156 (June 1992). A note of further supportive comments from Profs Carl Gans (*University of Michigan, Ann Arbor, U.S.A.*), Anthony P. Russell (*University of Calgary, Canada*) and Laurie J. Vitt (*Oklahoma Museum of Natural History, Norman, U.S.A.*) was published at the same time.

Further comments in support from Drs Mark R. Jennings (*U.S. Department of the Interior, Fish and Wildlife Service, San Simeon, California, U.S.A.*), Robert G. Sprackland (*Belmont, California, U.S.A.*), Hugh Griffith (*University of California, Berkeley, U.S.A.*) and Richard G. Zweifel (*American Museum of Natural History, New York, U.S.A.*) were published in BZN **49**: 234–235 (September 1992).

It was noted on the voting paper that copies of the application and of the comments published in June 1992 had been sent to Dr Lawrence E. Hunt (cf. paras. 4–6 of the application). The *Newsletter of the Southwestern Herpetologists Society*,

22(8): 5 (August 1992), stated that Dr Hunt now preferred to refer to the California legless lizard by its older, accepted name, *Anniella pulchra*, pending a decision by the Commission.

It was also noted that Gray's (1852) description was brief but, as noted by Hunt (1983, p. 80), 'it would be very difficult to demonstrate that his description was based on more than one specimen' (cf. para. 2 of the application).

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **48**: 317–318. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Štys.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Anniella Gray, 1852, *Annals and Magazine of Natural History*, (2)**10**(59): 440.

argentea, Anniella nigra, Hunt, 1983, *Copeia*, **1983**(1): 86.

pulchra, Anniella, Gray, 1852, *Annals and Magazine of Natural History*, (2)**10**(59): 440.

OPINION 1736

Hylobates entelloides I. Geoffroy Saint-Hilaire, 1842 (Mammalia, Primates): specific name conserved

Ruling

(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(a) *longimana* Schreber, [1774], as published in the binomen *Simia longimana*;

(b) *albimana* Vigors & Horsfield, 1828, as published in the binomen *Simia albimana*.

(2) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *longimana* Schreber, [1774], as published in the binomen *Simia longimana* and as suppressed in (1)(a) above;

(b) *albimana* Vigors & Horsfield, 1828, as published in the binomen *Simia albimana* and as suppressed in (1)(b) above.

History of Case 2770

An application for the conservation of the specific name of *Hylobates entelloides* I. Geoffroy Saint-Hilaire, 1842 was received from Miss Paulina D. Jenkins (*The Natural History Museum, London, U.K.*) and Dr Colin P. Groves (*Australian National University, Canberra, Australia*) on 24 April 1990. After correspondence the case was published in BZN **49**: 58–61 (March 1992). Notice of the case was sent to appropriate journals.

The specific name of *Hylobates entelloides* was placed on the Official List of Generic Names in Opinion 1219 (September 1982; BZN **39**: 168–171) but the names *Simia longimana* Schreber, [1774] and *S. albimana* Vigors & Horsfield, 1828 were not then considered.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 60. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 29: Bayer, Bock, Bouchet (in part), Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Bouchet commented that suppression of *Simia albimana* Vigors & Horsfield, 1828 was justified; however, *S. longimana* Schreber, [1774] could have been stabilised by designating the neotype of *Homo lar* Linnaeus, 1771 as a neotype for *S. longimana* and Commission action on this name would then not have been necessary.

Original references

The following are the original references to the names placed on an Official Index by the ruling given in the present Opinion:

albimana, *Simia*, Vigors & Horsfield, 1828, *Zoological Journal*, **4**(13): 107–109.
longimana, *Simia*, Schreber, [1774], *Die Säugthiere in Abbildungen nach der Natur mit Beschreibungen*, vol. 1, p. 67, pl. 3.

OPINION 1737

Palaeopropithecus ingens G. Grandidier, 1899 (Mammalia, Primates): generic and specific names conserved

Ruling

(1) Under the plenary powers the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(a) the generic name *Thaumastolemur* Filhol, 1895;

(b) the specific name *grandidieri* Filhol, 1895, as published in the binomen *Thaumastolemur grandidieri*.

(2) The name *Palaeopropithecus* G. Grandidier, 1899 (gender: masculine), type species by monotypy *Palaeopropithecus ingens* G. Grandidier, 1899, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *ingens* G. Grandidier, 1899, as published in the binomen *Palaeopropithecus ingens* (specific name of the type species of *Palaeopropithecus* G. Grandidier, 1899), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Thaumastolemur* Filhol, 1895, as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(5) The name *grandidieri* Filhol, 1895, as published in the binomen *Thaumastolemur grandidieri* and as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2785

An application for the conservation of the generic and specific names of *Palaeopropithecus ingens* G. Grandidier, 1899 was received from Drs Ian Tattersall (*American Museum of Natural History, New York, U.S.A.*), Elwyn L. Simons (*Duke University Primate Center, Durham, North Carolina, U.S.A.*) and Martine Vuillaume-Randriamanantena (*Service de Paléontologie, Université d'Antananarivo, Madagascar; Muséum National d'Histoire Naturelle, Paris, France*) on 6 August 1990. After correspondence the case was published in BZN **49**: 55–57 (March 1992). Notice of the case was sent to appropriate journals. A comment in support from Dr Eric Delson (*American Museum of Natural History, New York, N.Y., U.S.A.*) and 16 others from a number of institutions was published (p. 73) at the same time as the application.

Decision of the Commission

On 1 December 1992 the members of the Commission were invited to vote on the proposals published in BZN **49**: 56. At the close of the voting period on 1 March 1993 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Lehtinen.

Lehtinen considered that, since two names for a taxon had been proposed within four years based on material from adjacent type localities, priority should apply, particularly as the type material for the older name exists.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

grandidieri, *Thaumastolemur*, Filhol, 1895, *Bulletin du Muséum National d'Histoire Naturelle*, **1**(1): 13.

ingens, *Palaeopropithecus*, G. Grandidier, 1899, *Bulletin du Muséum National d'Histoire Naturelle*, **5**(7): 345.

Palaeopropithecus G. Grandidier, 1899, *Bulletin du Muséum National d'Histoire Naturelle*, **5**(7): 345.

Thaumastolemur Filhol, 1895, *Bulletin du Muséum National d'Histoire Naturelle*, **1**(1): 13.

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; the Commission's Secretariat reserves the right to return applications not so prepared.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . .'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in ASCII text in IBM PC format. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

Applicants would be well advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 50, part 2 (published on 30 June 1993). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Ischyrus* Lacordaire, 1842 and *Megischyrus* Crotch, 1873 (Insecta, Coleoptera): proposed conservation. (Case 2885). P.E. Skelley & M.A. Goodrich.

(2) *Dendrodoris grandiflora* Rapp, 1827 (Mollusca, Gastropoda): proposed conservation of the specific name. (Case 2886). J. Ortea & A. Valdés.

(3) *Brentus* Fabricius, 1787 (Insecta, Coleoptera): proposed conservation. (Case 2887). M.A. Alonso-Zarazaga.

(4) *Valdivianemertes* Stiasny-Wijnhoff, 1923 (Nemertea): proposed conservation. (Case 2888). F.B. Crandall.

(5) *Mastotermes darwiniensis* Froggatt, 1897 and *Termes meridionalis* Froggatt, 1898 (currently *Amitermes meridionalis*; Insecta, Isoptera): proposed retention of neotypes following rediscovery of syntypes. (Case 2889). J.A.L. Watson.

(6) *Rhopalosiphum monardae* Davis, 1911 (currently *Hyalomyzus monardae*; Insecta, Homoptera): proposed conservation of the specific name. (Case 2890). D.J. Voegtlin.

(7) *Helix pusilla* Lowe, 1831 (currently *Punctum pusillum*; Mollusca, Gastropoda): proposed conservation of the specific name. (Case 2891). M.B. Seddon, P.G. Oliver & D.T. Holyoak.

(8) *Bulimus doliolum* Bruguière, 1792 (currently *Sphyradium doliolum*) and *Helix coronata* Deshayes, 1850 (Mollusca, Gastropoda): proposed conservation of the specific names. (Case 2892). M.B. Seddon, P.G. Oliver & D.T. Holyoak.

(9) *Temnorhynchus* Hope, 1837 (Insecta, Coleoptera): proposed conservation. (Case 2893). F.-T. Krell.

(10) *Monstrilla* Dana, 1849 (Crustacea, Copepoda): proposed conservation. (Case 2894). M.J. Grygier.

(11) *Plesiosaurus rugosus* Owen, 1840 (currently *Eretmosaurus rugosus*; Reptilia, Plesiosauria): proposed designation of a neotype. (Case 2895). D.S. Brown & N. Bardet.

(12) *Scottia* Brady & Norman, 1889 (Crustacea, Ostracoda): proposed designation of *S. pseudobrowniana* Kempf, 1971 as the type species. (Case 2896). E.K. Kempf.

(13) *Agonus* Bloch & Schneider, 1801 (Osteichthyes, Scorpaeniformes): proposed conservation; AGONIDAE Kirby, 1837 (Insecta, Coleoptera) and AGONIDAE Swainson, 1839 (Osteichthyes, Scorpaeniformes): proposed removal of homonymy. (Case 2897). B.A. Sheiko.

(14) *Scomber dentex* Bloch & Schneider, 1801 (currently *Caranx* or *Pseudocaranx dentex*) and *Caranx lugubris* Poey, 1860 (Osteichthyes, Perciformes): proposed conservation of the specific names. (Case 2898). W.F. Smith-Vaniz & J.E. Randall.

(15) *Dodecaceria concharum* Örsted, 1834 (Annelida, Polychaeta): proposed conservation of usage by designation of a neotype. (Case 2899). P.H. Gibson & D. Heppell.

(16) *Porites* Link, 1807, *Galaxea* Oken, 1815, *Mussa* Oken, 1815 and *Dendrophyllia* Blainville, 1830 (Cnidaria, Anthozoa): proposed conservation. (Case 2900). D.C. Potts.

(d) *Ruling of the Commission.* Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

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The European Association for Zoological Nomenclature has been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

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The dating of certain of d'Orbigny's brachiopod and bivalve nominal taxa

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The most widely cited sources concerning authorship of higher taxa among brachiopods are Dall (1877), Schuchert & LeVene (1929), Muir-Wood (1955) and Williams et al. (1965). Resulting from our work on the revision of the *Treatise on Invertebrate Paleontology* (1965) we have found that changes in some current assumptions are necessary.

A number of brachiopod families and genera were erected in several publications by d'Orbigny between 1847 and 1852, and the date of issue of some of these papers has often been disputed. Thus Sherborn (1899), using the independent evidence of contemporaneous literature surveys in the *Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefakten-Kunde* (co-edited by H.G. Bronn), pointed out that d'Orbigny's famous *Paléontologie Française. Terrains Crétacés*, vol. 4 (our reference '1847d'), although displaying the date 1847 on the title page, was in fact issued at various times between 1848 and 1851. Presumably it is for this reason that authorship and date of the family RHYNCHONELLIDAE has often been attributed to Gray (1848), with the notable recent exception of Laurin (1984, pp. 15–16, 360). Laurin postulated d'Orbigny (1847) as author of this name, though he admitted to uncertainty about details of its first publication and assumed that Gray and d'Orbigny would have been ignorant of each other's papers (see also Zittel, 1880, pp. 661, 689).

We decided to look into the matter further as there are other papers by d'Orbigny (1847a, b, 'c') which are relevant to this issue and have similar titles. D'Orbigny's initial contribution was read to the Paris Academy of Sciences at the sessions of 2 and 16 August 1847 and appeared in two different parts of the *Comptes Rendus* (internally dated as Second Semester 1847; see pp. 177, 265, footnotes). These are our reference d'Orbigny (1847a). Fuller versions were subsequently published in the *Annales des Sciences Naturelles*, the first part in vol. 8 (internally dated as October 1847) and the second part in vol. 13 (internally dated as June 1850). The first part of this expanded version is our reference d'Orbigny (1847b) and the second is our d'Orbigny ('1847c').

When external evidence from the *Neues Jahrbuch* is taken into account it becomes clear that only d'Orbigny (1847a and 1847b) could have been published, in that order, in 1847 and fairly late in the year. Neither of them was noted within the *Neues Jahrbuch* for 1847, but both parts of d'Orbigny (1847a) were reviewed together and in essence translated by Bronn (1848, pp. 244–248) quite early in 1848. Bronn introduced some emendations, unjustified by present standards, to d'Orbigny's original spellings. That same issue of the *Neues Jahrbuch* included a critical report by Roemer on James Hall's *Palaeontology of New York*, vol. 1 (1847), and letters to the

editor dating from 20 October 1847 to 10 January 1848. Later (*Neues Jahrbuch*, 1848, p. 478) a report appeared on vol. 8 (for July-October 1847) of the *Annales des Sciences Naturelles* which specifically referred to d'Orbigny's paper and earlier review. This later issue of the *Neues Jahrbuch* contains editorial correspondence dating from 21 April to 18 June 1848.

Gray's paper (1848) was not printed until the last issue (December) of *Annals and Magazine of Natural History* for 1848, and records that d'Orbigny (1847b) was already published. Hence, d'Orbigny's (1847a, 1847b) nomenclatural acts have priority over Gray (1848), and Bronn (1848, pp. 244–248) predates Gray within 1848. Other nomenclatural contributions by d'Orbigny himself (1848, p. 12; 1850, p. 321; 1851, p. 342; 1852, p. 85) now become irrelevant inasmuch as they postdate Gray. Consequently the family-group names based on *Rhynchonella* (RHYNCHONELLACEA, RHYNCHONELLIDAE and RHYNCHONELLINAE) should all be attributed to d'Orbigny (1847a, p. 268). The family name was used subsequently by Gray (1848), Bronn (1848, p. 246, as RHINCHONELLIDAE) and Carpenter in Davidson (1853, p. 35, as RHYNCONELLIDAE). The superfamily was first proposed by Schuchert (1896, p. 323) and the subfamily by Gill (1871, p. 25).

During the course of our inquiry into the validity of d'Orbigny's taxa we noticed that the authorship of other family group names also appears to be at variance with currently accepted citations in the *Treatise on Invertebrate Paleontology*, parts H and N (Williams et al., 1965; Cox et al., 1969), and also in Sarycheva et al. (1960, pp. 186, 250, 282, 304) and Ehberzin et al. (1960, pp. 158, 160). The necessary corrections, as we see them, are noted below for the use of colleagues working on the relevant groups who might find such information useful. Items (a) to (d) concern brachiopods and the remaining observations relate to molluscs. No criticism of past research on these taxa is implied here.

(a) On p. H311, the family ORTHIDAE is attributed to Woodward (1852, p. 229) but it had already been made available (as ORTHISIDAE) by d'Orbigny (1847a, p. 267). Woodward only corrected the spelling.

(b) On p. H649, the family UNCITIDAE is attributed to Waagen (1883, pp. 487, 494) as a subfamily, later raised to family rank by Schuchert (Schuchert & LeVene, 1929, p. 22). In fact it had been made available by d'Orbigny (1847a, p. 268).

(c) On p. H849, the subfamily MAGADINAE is attributed to Davidson (1886, p. 4, as MAGASINAE), with stem correction by Elliot & Hatai therein. However, earlier uses are known: as MAGASINAE by H. & A. Adams ([1858], p. 576; see also Dall, 1877, pp. 45, 77) and most importantly by d'Orbigny (1847a, p. 268, as MAGASIDAE). D'Orbigny's name threatens, on grounds of priority, the widespread usage of the superfamily TEREBRATELLACEA and family TEREBRATELLIDAE of King (1850, p. 245), who was clearly aware of d'Orbigny's proposal, even though accepting it with a modified scope (cf. pp. 142, 246). For the sake of stability this may require Commission intervention.

(d) It should be noted that d'Orbigny (1847a) also introduced a number of brachiopod generic names: *Orthisina* (p. 267), *Hemithiris* (p. 268), *Spiriferina* (p. 268), *Spirigerina* (p. 268), *Spirigera* (p. 268), *Terebratulina* (p. 268), *Terebratella* (p. 269), *Terebrirostra* (p. 269), *Fissirostra* (p. 269), *Megathiris* (p. 269), *Orbicella* (p. 269), *Orbiculoidea* (p. 269). Save for a few minor exceptions most have been adopted as available from that date and those pages by Williams et al. (1965). The last name was recorded by the Commission in Opinion 722 (April 1965).

In addition, two families of the rudist order Hippuritoida Newell, 1965, now classed with the Bivalvia but considered by d'Orbigny (1847a) to be an order of the Brachiopoda, were recognised by him. These were the CAPRINIDAE (p. 269), based on the genus *Caprina* C. d'Orbigny, 1822 and also including *Hippurites*, *Caprinula* and *Caprinella*, and the RADIOLITIDAE (p. 269, as RADIOLIDAE; correctly spelled by Gray, 1848, p. 439), based on *Radiolites* and including *Caprotina* A. d'Orbigny, 1842.

The family CAPRINIDAE was first mentioned by d'Orbigny (1842) in the vernacular form Caprinidées, based on *Caprina* and additionally including *Caprotina* and *Icthyosarcolites*. The majority of monographic works mention neither author nor date for this family so it is not available from 1842 under Article 11f(iii) of the Code. We recommend that the name CAPRINIDAE d'Orbigny be recognised as available from its first latinized usage (1847a, p. 269).

The family name HIPPURITIDAE Gray, 1848 (p. 440) was placed on the Official List in Opinion 613 (November 1961); in 1842 d'Orbigny had used the vernacular Hippuridées. It follows that in the superfamily recognised by Cox et al. (1969, p. N749) as the HIPPURITACEA Gray, 1848 there are two older family names of d'Orbigny (1847a): CAPRINIDAE and RADIOLITIDAE.

We invite comments from specialists interested in either Brachiopoda or Mollusca concerning the best actions to undertake in order to stabilize nomenclature.

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Case 2854

Robulina nodosa Reuss, 1863 (currently *Lenticulina nodosa*; Foraminiferida): proposed retention of neotype despite rediscovery of syntypes

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Abstract. The purpose of this application is to retain as the name-bearing type the neotype designated by Bartenstein (1974) of the Cretaceous foraminifer *Lenticulina nodosa* (Reuss, 1863) despite the rediscovery of Reuss's collection.

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1. In 1863 Reuss described a large number of foraminifera from the Cretaceous of North Germany including *Robulina nodosa* (p. 78, pl. 9, fig. 6). The Reuss collection was believed to have been lost and Bartenstein (1974, p. 540, pl. 1, fig. 1) designated and figured a neotype of *Lenticulina nodosa* (Reuss) from the basal Lower Hauterivian, N.W. Berklingen (Asse), the type locality of Reuss; it is registered as C 30169 in the Naturhistorisches Museum, Basle.

2. The rediscovery of the Reuss collection was announced by Papp, Rögl & Schmid (1977), although the catalogue is still missing. We (Meyn & Vespermann, 1989) examined this collection in the Naturhistorisches Museum in Vienna and identified the syntypes of *Robulina nodosa*. We (Meyn & Vespermann, 1993) are redescribing the syntypes but do not propose a lectotype because all the syntypes are damaged and none shows the aperture or a complete final chamber. The neotype is conspecific with, and better preserved than, any of the syntypes.

3. Article 75h of the Code states that 'if, after the designation of a neotype, the ... syntypes of the nominal species-group taxon are found still to exist, the case is to be referred to the Commission to rule whether the neotype is or is not to be retained as the name-bearing type'. We recommend that the neotype of *Robulina nodosa* should be retained as the name-bearing type.

4. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to confirm as the name-bearing type for *Robulina nodosa* Reuss, 1863 the neotype designated by Bartenstein (1974);

(2) to place on the Official List of Specific Names in Zoology the name *nodosa* Reuss, 1863, as published in the binomen *Robulina nodosa* and as defined by the neotype designated by Bartenstein (1974).

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Case 2855

Cristellaria humilis Reuss, 1863 (currently *Astacolus humilis*; Foraminiferida): proposed replacement of neotype by rediscovered lectotype, and *Rotalia schloenbachi* (currently *Notoplanulina? schloenbachi*; Foraminiferida): proposed placement on the Official List

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Abstract. The purpose of this application is to replace the neotype of the Cretaceous foraminifer *Astacolus humilis* (Reuss, 1863) with the lectotype designated from Reuss's collection recently rediscovered in the Naturhistorisches Museum, Vienna. It is proposed also to place the specific name of *Notoplanulina? schloenbachi* (Reuss, 1863) on the Official List.

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1. In 1863 Reuss described a large number of foraminifera from the Cretaceous of North Germany. Two of his species, *Cristellaria humilis* and *Rotalia schloenbachi*, are here considered in turn. The Reuss collection was believed to have been lost but its rediscovery was announced by Papp, Rögl & Schmid (1977). We (Meyn & Vespermann, 1993) redescribed the material, which is in the Naturhistorisches Museum, Vienna. We now ask (para. 5 below) the Commission to rule that the neotype designated by Bartenstein (1974) (see para. 2 below) for *Cristellaria humilis* be replaced by the lectotype from the rediscovered Reuss collection.

Cristellaria humilis Reuss, 1863 (p. 65, pl. 6, figs. 16, 17)

2. Bartenstein (1974, p. 554, pl. 2, fig. 19) designated and figured a neotype from the basal Lower Hauterivian, N.W. Berklingen (Asse), the type locality of Reuss; it is registered as C 30173 in the Naturhistorisches Museum, Basle. We (Meyn & Vespermann, 1989) examined Reuss's rediscovered collection and (Meyn & Vespermann, 1993) propose as the lectotype the specimen figured by Reuss in pl. 6, fig. 16, which is registered as no. 970 in the Reuss collection. The lectotype is better preserved than the neotype. Even though the aperture of the lectotype is damaged, the apertural socket shows its rearwards-directed position. Reuss emphasized that his figure (pl. 6, fig. 16) characterized the 'typical form of the test' from the Berklingen area. We have topotypic samples from localities mentioned by Reuss and can make a direct comparison between the syntypes and our own material. The mode of preservation of the specimens and the faunal composition of the samples have enabled us to determine the stratigraphic horizon of the syntypes. *Cristellaria humilis* is from the lower Lower Hauterivian of Berklingen and the syntypes came from a sample of the calcareous marls which are found locally only in the eastern part of the Lower Saxony Basin. The 'Oberer Hilsthon' of Reuss does not necessarily correspond with the uppermost Hauterivian to Barremian as stated by Bartenstein (1974, pp. 541, 555). The 'tiefster oberer Hilsthon' of the Berklingen area (Reuss, 1863,

p. 9) is in fact Lower Hauterivian (see Meyn & Vespermann, 1987). The lectotype and neotype are conspecific so no change in the concept of the species would result from the replacement of the neotype by the lectotype.

3. Article 75h of the Code states that 'if, after the designation of a neotype, the ... lectotype ... is found still to exist, the case is to be referred to the Commission to rule whether the neotype is or is not to be retained as the name-bearing type'. We recommend that the neotype of *Cristellaria humilis* should not be retained as the name-bearing type.

Rotalia schloenbachi Reuss, 1863 (p. 84, pl. 10, fig. 5)

4. Crittenden & Price (1991, p. 254) designated a neotype for *Rotalia schloenbachi* from the same geographical area and the same geological formation (Gault Clay = 'Minimusthon) as Reuss's locality. The neotype is numbered BM(NH) P.52254 in the collections of the Natural History Museum in London. They considered in turn each of the qualifying conditions for a valid neotype designation given in Article 75d of the Code. However, they overlooked the fact that Reuss's collection had been rediscovered, as reported by Papp, Rögl & Schmid (1977) and by us (Meyn & Vespermann, 1989). It follows that their neotype designation was invalid. We (Meyn & Vespermann, 1993) propose a lectotype (no. 1685 in the Reuss collection). No Commission action is required to set aside Crittenden & Price's invalid neotype designation but we ask the Commission to place *Rotalia schloenbachi* on the Official List of Specific Names in Zoology as the most effective way of recording the situation.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to set aside the neotype designation for *Cristellaria humilis* Reuss, 1863 made by Bartenstein (1974);

(2) to place on the Official List of Specific Names in Zoology the following names:
   (a) *humilis* Reuss, 1863, as published in the binomen *Cristellaria humilis* and as defined by the lectotype proposed by Meyn & Vespermann (1993) (no. 970 in the Reuss collection);
   (b) *schloenbachi* Reuss, 1863, as published in the binomen *Rotalia schloenbachi* and as defined by the lectotype proposed by Meyn & Vespermann (1993) (no. 1685 in the Reuss collection).

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Case 2871

Helix nitidula Draparnaud, 1805 and *H. nitens* Michaud, 1831 (currently *Aegopinella nitidula* and *A. nitens*; Mollusca, Gastropoda): proposed conservation of the specific names and designation of a neotype for *H. nitidula*

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Abstract. The purpose of this application is to conserve the specific names of *Aegopinella nitidula* (Draparnaud, 1805) and *A. nitens* (Michaud, 1831) which are in universal use for common terrestrial pulmonate species (family ZONITIDAE) from western Europe. It has long been recognised that the existing syntype of *A. nitidula* is a specimen of *A. nitens* and it is therefore proposed that a neotype be designated for the former species in accordance with current usage, so conserving also the usage of *A. nitens*. The suppression is proposed of *Helix nitens* Gmelin, [1791], a little-used senior primary homonym of *H. nitens* Michaud, 1831 but a junior objective synonym of *H. nitida* Müller, 1774. The name *H. nitidula* Draparnaud was placed on the Official List in Opinion 336 (March 1955).

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1. Draparnaud (1805, p. 117) established the name *Helix nitidula* for a new species of mollusc. He described the taxon but did not provide a figure or mention a locality or specimens. He also briefly described and figured *H. nitidula* var. β (pp. 117, 118, pl. 8, figs. 21, 22), noting that it was 'une variété plus petite et plus sensiblement striée'.

2. In 1894 Locard studied Draparnaud's mollusc collection, housed in the Naturhistorisches Museum in Vienna. Locard (1895, pp. 1–27) recorded that, following Draparnaud's death in 1804 and that of his widow, Draparnaud's heirs had sold the collection to the Museum in 1820; this included type material for many new taxa described in Draparnaud's publications *Tableau des mollusques terrestres et fluviatiles de la France* (1801) and *Histoire naturelle des mollusques ... de la France* (published posthumously in 1805). Locard (p. 13) recorded that Draparnaud's own handwritten labels, giving the name of the taxon (with varieties indicated by Greek letters) and the number corresponding to that used in the *Histoire naturelle*, were still in place in the glass tubes containing each specimen. However, Locard found that the collection in 1894 was less complete than in 1820, and that the Museum register recorded that specimens of several of the better represented species had been given to Bischof von Hohenwarth.

3. Locard (1895, p. 26) noted that of the two original specimens of *Helix nitidula* in Draparnaud's collection in 1820 one had subsequently been removed to Bischof von Hohenwarth's collection (which is very probably now lost); he identified (pp. 147–150) the remaining specimen labelled as this species as an adult specimen of *H. nitens* Gmelin, [1791] (see para. 5 below). He also noted that the specimen described and figured by Draparnaud as *H. nitidula* var. β (see para. 1 above) was a

juvenile of a totally distinct species. Under Article 72b(i) of the Code this variant is excluded from the type series of *H. nitidula*; it was however included by both Locard (1895, pp. 26, 147, 148) and Forcart (1957, p. 203; 1959, p. 21; see para. 4 below). Locard (p. 148) commented that authors had been inconsistent in their use of the name *nitidula*; Rossmässler (1835, p. 72, pl. 1, fig. 24; 1838, p. 36, pl. 39, fig. 526), Dupuy (1848–1849, pp. 226–228, pl. 10, fig. 5) and Westerlund (1886, p. 57) had described under this name a species which differed from that of Draparnaud (1805) and Dupuy's figure showed a more rounded shell than that of Rossmässler.

4. Forcart (1957, p. 203; 1959, pp. 21–22) commented that the current concept of *H. nitidula* differed from the taxon described by Draparnaud (1805) under that name, and that Draparnaud's (p. 118) statement 'Animal gris de perle, tacheté de points noirs et blancs' did not apply to any species of *Aegopinella* Lindholm, 1927 (the genus in which *nitidula* auctt. is now placed). Forcart (1957, 1959) noted that the current usage of *nitidula* dated from Rossmässler (1835, 1838); he recorded (1957, p. 203; 1959, p. 21, pl. 3, fig. 6) Draparnaud's remaining (adult) syntype of *H. nitidula* as a fully-grown specimen of *H. nitens* Michaud, 1831 (p. 44, pl. 15, figs. 1–5) (cf. Locard's identification in para. 3), and that the latter name was a junior primary homonym of *H. nitens* Gmelin, [1791] (see para. 5 below).

5. Gmelin ([1791], pp. 3624, 3633) included both *Planorbis nitidus* Müller, 1774 (p. 163) and *Helix nitida* Müller, 1774 (p. 32) in *Helix* Linnaeus, 1758; he replaced the latter name with *H. nitens* Gmelin, [1791] (p. 3633), no doubt to avoid secondary homonymy. Gmelin's taxonomic placement of *P. nitidus* was not subsequently followed (see, for example, Draparnaud, 1805, p. 46, pl. 2, figs. 17–19; pl. 8, figs. 11–12; Michaud, 1831, pp. 46, 82; and Dupuy, 1848, p. 222; 1850, p. 448) and *H. nitens* Gmelin has had very little use as a valid name. *P. nitidus* Müller, 1774 is the valid name of the type species by monotypy of *Segmentina* Fleming, 1818 (family PLANORBIDAE), whilst *H. nitida* Müller, 1774 is the type by monotypy of *Zonitoides* Lehmann, 1862 (family ZONITIDAE). The names *Segmentina*, *P. nitidus*, *Zonitoides* and *H. nitida* have been placed on Official Lists (Opinion 335; March 1955). Forcart (1957, p. 199) stated that G.L. Hartmann (1807, p. 222) and W. Hartmann (1821, p. 232) employed the name *H. nitens* sensu Gmelin; however, he later (1959, p. 24) concluded that Hartmann (1807) had used the name sensu Michaud (1831). Forcart (1959, p. 24, pl. 3, fig. 9a–d) designated a specimen in the Lyon Museum, France as the lectotype of *H. nitens* Michaud.

6. Both the names *nitidula* Draparnaud, 1805 and *nitens* Michaud, 1831 are universally in use for common terrestrial pulmonate species of western Europe. The taxa are conchologically similar but have different distributions. *H. nitidula* occurs in a variety of habitats along the Atlantic side of Europe from Spain to Scandinavia, including the British Isles; it is absent from Switzerland. *H. nitens* is a montane species, found in abundance in the French and Swiss Jura. Both names have appeared in field guides in a number of languages, and in works on molluscan biology and ecology, as well as taxonomy. Recent publications in which both names have been used include Jaeckel (1962, p. 131), Zilch (1962, p. 15), Ložek (1964, pp. 246, 247), Riedel (1966, p. 60), Kerney & Cameron (1979, pp. 121, 122), Kerney & Cameron (1980, p. 136), Kerney, Cameron & Jungbluth (1983, pp. 165, 166), Pfleger & Chatfield (1983, pp. 90, 193) and Gittenberger, Backhuys & Ripken (1984, pp. 87, 89). A list of a further 16 representative references is held by the Commission

Secretariat for the name *nitidula*, and a further six for *nitens*. The name *H. nitidula* was included, without comment, in the mollusc names placed on the Official List in Opinion 336 (March 1955).

7. Recognition of Draparnaud's (1805) syntype of *H. nitidula* would necessitate using *nitidula* as the valid name for the species now called *nitens* Michaud, 1831, with *nitens* becoming a junior subjective synonym. Another name would be required for *nitidula* as currently understood. These changes would cause considerable and unnecessary confusion. I therefore propose that the current understanding of the name *nitidula* should be conserved by setting aside the type status of Draparnaud's syntype and designating a neotype which accords with current usage (see para. 4 above). Since the zonitids in general and *Aegopinella* species especially are poorly defined by shell characters, whereas the genitalia are more clearly diagnostic, a specimen from which both shell features and anatomical data can be demonstrated has been selected. The proposed neotype is from France (Department of Pas-de-Calais, Forêt de Guines, 3 km south-east of Guines, UTM DS13), deposited in the Naturhistorisches Museum, Vienna (catalogue no. 86934). The shell is 4.1 mm high and 8.1 mm broad. It has four whorls that increase relatively slowly and gradually in width. The genitalia are similar to those figured for the species by Forcart (1959, figs. 6–8). A full description and illustrations of the specimen are given by Gittenberger (1993). I also propose that the name *H. nitens* Michaud, 1831 should be conserved by the suppression of the unused senior homonym *H. nitens* Gmelin, [1791].

8. Forcart (1957, p. 203; 1959, p. 22) proposed to apply to the Commission to conserve the current usage of *H. nitidula* Draparnaud, and (1957, p. 199; 1959, p. 24) to conserve the name *nitens* Michaud by the suppression of *nitens* Gmelin. However, he made no application. This present application is known to several specialists in the field and there is agreement on the proposals. During a recent meeting (1992) on European non-marine molluscan nomenclature, held near Heidelberg, all the 20 participants concurred with the proposals.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:
  (a) to set aside the type status of the syntype of *Helix nitidula* Draparnaud, 1805 and to designate as neotype the specimen proposed in para. 7 above;
  (b) to suppress the specific name *nitens* Gmelin, [1791], as published in the binomen *Helix nitens*, and all uses of the name *Helix nitens* prior to the publication of *Helix nitens* Michaud, 1831, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to add to the entry for *Helix nitidula* Draparnaud, 1805 on the Official List of Specific Names in Zoology the endorsement that it is defined by the neotype designated in (1)(a) above;

(3) to place on the Official List of Specific Names in Zoology the name *nitens* Michaud, 1831, as published in the binomen *Helix nitens* and as defined by the lectotype designated by Forcart (1959);

(4) to place on the Official Index of Specific Names in Zoology the name *nitens* Gmelin, [1791], as published in the binomen *Helix nitens* and as suppressed in (1)(b) above (a junior objective synonym of the specific name of *Helix nitida* Müller, 1774).

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Case 2860

Pleurotoma meneghinii Mayer, 1868 (currently *Asthenotoma meneghinii*; Mollusca, Gastropoda): proposed replacement of neotype by rediscovered lectotype

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Abstract. The purpose of this application is to replace the neotype of the Upper Miocene species *Pleurotoma meneghinii* Mayer, 1868, designated in 1990, by a lectotype selected from the type series of the taxon which has been rediscovered recently in the Mayer-Eymar collection in the Naturhistorisches Museum, Basel. The neotype and proposed lectotype are conspecific. *P. meneghinii* is the type species of *Asthenotoma* Harris & Burrows, 1891, a gastropod genus (family TURRIDAE) which includes mainly species from the European Tertiary.

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1. The turrid nominal species *Pleurotoma meneghinii* was established by Mayer (1868, pp. 109–110, pl. 3, fig. 3) for specimens found in the Tortonian (Upper Miocene) strata cropping out near Sassuolo, in the northern Apennines, Italy.

2. Bellardi (1875, p. 21) erected the genus *Oligotoma* and included '*Ol. Meneghinii* (May.)' as the single species, which is thus the type by monotypy. Two years later (1877, pp. 239–240) he listed *Pleurotoma meneghinii* as a synonym of *Oligotoma tuberculata*, a turrid described by Pusch (1836, p. 522, as *Pleurotoma*) from the Badenian (Middle Miocene) Korytnica Clays of the Swietokrzyskie (Holy Cross) Mountains, southern Poland. Subsequently *Oligotoma* Bellardi was renamed *Asthenotoma* by Harris & Burrows (1891, p. 113) because of the homonymy with *Oligotoma* Westwood, 1836 (p. 373, pl. 11, figs. 2, 2a–2f; Insecta). The synonymy between *Pleurotoma meneghinii* and *P. tuberculata* proposed by Bellardi was accepted by the majority of authors (see, for example, Woodring, 1928, p. 197; Powell, 1942, p. 111; Wenz, 1943, p. 1413; Glibert, 1960, p. 64; Anderson, 1964, p. 299; Powell, 1966, p. 65; Rasmussen, 1968, p. 197; Amitrov, 1973, p. 140; Shuto, 1980, p. 44).

3. In 1987 a comparison between topotypes of *P. meneghinii* Mayer, 1868 and *P. tuberculata* Pusch, 1836 led me to believe that the two taxa were not conspecific. In order to confirm this assumption, Dr I. Dieni (Padova) and I attempted to trace the type specimens of *P. meneghinii*. The Mayer-Eymar collection, where the specimens were believed to exist, was housed until 1965 in the Eidgenössische Technische Hochschule in Zürich, where Mayer was Professor of Palaeontology and curator of collections; it was then moved to the Naturhistorisches Museum in Basel, where it is housed on an unlimited loan. Unfortunately, in spite of a great deal of search, P. Jung of the Naturhistorisches Museum failed to find the specimens in the vast collection (P. Jung, written comm. to I. Dieni, 22 June 1987). Consequently, I (Gatto, 1990, p. 224, pl. 1, figs 1a,b) designated a neotype for *Pleurotoma meneghinii* in accordance with Article 75b of the Code. It was desirable to fix a type specimen

because of the doubtful identity of the alleged senior subjective synonym *P. tuberculata*, of which the types were destroyed at the beginning of the Second World War, and because of the problematic status of the genus *Asthenotoma*, of which *P. meneghinii* is the type species (see discussion in Gatto, 1990). The neotype of *P. meneghinii* was selected from topotypes preserved in the Doderlein collection of the Istituto di Paleontologia dell'Università of Modena, Italy.

4. In 1991, during a visit to the Naturhistorisches Museum, Basel, I rediscovered in the Mayer-Eymar collection the eight specimens forming the type series of *P. meneghinii*, registered as 'Po. 4918' in Mayer's original catalogue. I found two labels with the specimens. The first was very probably handwritten by Mayer ('*Pleurotoma Meneghinii* Mayer - J. de Conch. - Tortonien - Sassuolo p. Modène (2 3) - Po. 4918. - 8 Ex.'); the second ('4918 - *Oligotoma tuberculata* (Pusch)') is most likely that of Bellardi who probably received the material on loan from Mayer during the preparation of his (1877) monograph on the Tertiary molluscs of northwestern Italy and returned it with his own identification (see para. 2 above). The rediscovered types of *P. meneghinii* agree in all respects with Mayer's (1868) original description, and also with the neotype designated by me in 1990. Furthermore, they strengthen the evidence that Mayer's species is not synonymous with *P. tuberculata*. I (Gatto, 1993) have redescribed the specimens and illustrated them photographically for the first time. I have also designated the specimen originally figured in 1868 by Mayer (now registered in the Basel collection as H 17365) as the lectotype of *Pleurotoma meneghinii* subject to approval by the Commission.

5. According to Article 75h of the Code the rediscovery of the original material of *Pleurotoma meneghinii* after the designation of the neotype must be referred to the Commission. Although there will be no change in the concept of the species since the neotype and lectotype are conspecific, it would be preferable that the neotype of *P. meneghinii* selected in 1990 should no longer retain its status of name-bearing type as the original material has been rediscovered and is available for study.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside the neotype designation for *Pleurotoma meneghinii* Mayer, 1868 made by Gatto (1990) and to confirm the lectotype designation by Gatto (1993);

(2) to place on the Official List of Generic Names in Zoology the name *Asthenotoma* Harris & Burrows, 1891 (gender: feminine), type species by monotypy of the replaced nominal genus *Oligotoma* Bellardi, 1875, *Pleurotoma meneghinii* Mayer, 1868;

(3) to place on the Official List of Specific Names in Zoology the name *meneghinii* Mayer, 1868, as published in the binomen *Pleurotoma meneghinii* (specific name of the type species of *Asthenotoma* Harris & Burrows, 1891) and as defined by the lectotype designated by Gatto (1993), confirmed in (1) above.

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Case 2841

Platynectes Régimbart, 1879 (Insecta, Coleoptera): proposed conservation

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Abstract. The purpose of this application is to conserve the name *Platynectes* Régimbart, 1879 for a genus of diving water beetles (family DYTISCIDAE). It is threatened by the unused senior synonym *Plateocolymbus* Gistel, 1857.

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1. Gistel (1857a, p. 606) established the genus *Plateocolymbus*; the name and description were also included in Gistel (1857b, p. 93). There is no evidence which of these two works was published first but, since Gistel (1857b) is an extract from Gistel (1857a), the latter work is taken as having priority. Gistel included in *Plateocolymbus* only the species *Colymbetes lineatus* Redtenbacher in Kollar & Redtenbacher, 1844 (p. 503) from Asia, which is the type species by monotypy. Balfour-Browne (1944, p. 352) noted that *Colymbetes lineatus* Redtenbacher (which he placed in *Platynectes*; see para. 2 below) was a junior primary homonym of *C. lineatus* Guérin, 1830, and he proposed *Platynectes kashmiranus* as a replacement name.

2. In a paper published in 1879 Régimbart (p. 462) described a new genus *Platynectes* for a group of South American, Australian and New Zealand species formerly placed in the genus *Agabus* Leach, 1817. The cover of Régimbart's paper bears the date 26 March 1878, but this is a misprint for 1879. The type species of *Platynectes* is *Agabus decemnotatus* Aubé, 1838 (p. 319), by subsequent designation by Guignot (1946, p. 117).

3. Gemminger & Harold deliberately omitted Gistel's names from the *Catalogus Coleopterorum* (1868a, p. vi), adding that 'mit einer sonst seltenen Einstimmigkeit das gesammte wissenschaftliche Publikum sein Verdikt ausgesprochen hat'. Gistel's names have rarely been cited in the literature. One exception is Strand (1917) who listed all the new names proposed by Gistel (1857b). He included *Plateocolymbus* (p. 80), this being the only published reference to the name since its original publication. Strand gave *Colymbetes lineatus* Redtenbacher as the type but did not mention the subjective synonymy of *Plateocolymbus* and *Platynectes* (see para. 4 below). Nilsson, Roughley & Brancucci (1989) overlooked all Gistel's family-group and genus-group names in the DYTISCIDAE.

4. Sharp (1882, pp. 538, 887) accepted *Platynectes* as a valid genus and included 13 species. He referred another eight species, including *P. lineatus* Redtenbacher (= *kashmiranus* Balfour-Browne), to *Platynectes* with some doubt; his hesitation over *kashmiranus* was because he knew this species only from the original description. Van den Branden (1885, p. 77) listed all these species in *Platynectes* without reservation. In Sharp's and Van den Branden's classification *Platynectes* is a junior subjective synonym of *Plateocolymbus*. All subsequent workers have accepted *Platynectes* and

have included *lineatus* or *kashmiranus* in it (for example, Régimbart, 1899, p. 281; Brinck, 1948, p. 113; Guéorguiev, 1972, p. 34; Vazirani, 1976, p. 171; a further six references by six authors in the last 23 years are held by the Commission Secretariat). To reject *Platynectes* Régimbart, 1879 because of its junior subjective synonymy with the unused name *Plateocolymbus* Gistel, 1857 would create instability in the literature and cause considerable confusion.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *Plateocolymbus* Gistel, 1857 for the purposes of the Principle of Priority but not those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Platynectes* Régimbart, 1879 (gender: masculine), type species by subsequent designation by Guignot (1946) *Agabus decemnotatus* Aubé, 1838;

(3) to place on the Official List of Specific Names in Zoology the name *decemnotatus* Aubé, 1838, as published in the binomen *Agabus decemnotatus* (specific name of the type species of *Platynectes* Régimbart, 1879);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Plateocolymbus* Gistel, 1857, as suppressed in (1) above.

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Case 2880

Polycentrus schomburgkii Müller & Troschel, 1848 (Osteichthyes, Perciformes): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Polycentrus schomburgkii* Müller & Troschel, 1848, which has been used consistently since publication for a leaf fish (family NANDIDAE) found in the Atlantic drainages of the Guianas and Venezuela, and on Trinidad. The name is threatened by the unused senior subjective synonym *Labrus punctatus* Linnaeus, 1758, for which suppression is proposed.

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1. Linnaeus (1758, p. 285) based his description of *Labrus punctatus* on his 1754 (p. 66, pl. 31, fig. 5) description of a specimen in the Museum Adolphi Friderici and Gronovius's (1754, p. 36, no. 87) description of 'Labrus bruneus'. A single specimen labelled *punctatus* is present in Linnaeus's fish collection housed in the Naturhistoriska Riksmuseet, Stockholm (catalogue no. NRM 43; see Fernholm & Wheeler, 1983, pp. 252–253) which was designated the lectotype by Kullander (1983, p. 84).

2. Walbaum (1792, p. 250) was the first author to recognise that Linnaeus's specimen of *Labrus punctatus* and Gronovius's description were distinct; he noted 'Labrus bruneus. Gronovii a Linnaeo allegatus, ad Sparos relatus est' [Labrus bruneus of Gronovius, referred to by Linnaeus, is related to *Sparus*]. Gronovius's specimen is lost; his description refers to a species of the family CICHLIDAE.

3. Müller & Troschel (1848, p. 622) published the new generic and specific names *Polycentrus schomburgkii* with a short description. A year later this was followed by a more detailed description and illustration (Müller & Troschel, 1849, pp. 25–26, pl. 5, fig. 2). There are 30 syntypes (2 subadults and 28 juveniles) which were collected in the Essequibo (British Guiana, now Guyana). The specimens are in good condition and are deposited in the Zoological Museum of the Humboldt-University of Berlin, catalogue nos. ZMB 1024 and ZMB 20604.

4. Smitt (1893, p. 11) identified Linnaeus's specimen from the Museum Adolphi Friderici as *P. schomburgkii* and recorded: 'In the *Mus. Ad. Frid.* p. 66, he [Linnaeus] assigns no region to *Sciaena* (*Labrus*, *Syst. Nat.*) *punctata*, which, to judge by the specimen in the Royal Museum, is the species that has subsequently been named *Polycentrus schomburgkii* by Müller and Troschel'. However, as Smitt's observation was published in *A history of Scandinavian fishes*, until 1983 no worker on the South American fish fauna was aware of his discovery. During the 90 years following Smitt's publication, with very few exceptions (see para. 7 below), only the name *Polycentrus schomburgkii* was used for Schomburgk's leaf fish (see, for example, the more recent works of Eigenmann, 1912, p. 522; Barlow, 1967a, 1967b; Liem, 1970;

Magio Leccia, 1970, p. 102; Vilanova, 1979). Linnaeus's name has never been used for the species.

5. In 1983 two papers were published (Fernholm & Wheeler (July) and Kullander (October)) in which *P. schomburgkii* was recognised as a junior subjective synonym of *L. punctatus*. Both papers noted that in 1758 (but not in 1754) Linnaeus had recorded incorrectly the meristic data of the *punctatus* specimen; Fernholm & Wheeler also noted that Linnaeus's (1754) illustration was very poor. The conclusions in the two papers were very different. Fernholm & Wheeler (1983, p. 253) commented: 'We consider there are no grounds for replacing the well-known binomen *Polycentrus schomburgkii* Müller & Troschel, 1848 with *Labrus punctatus* Linnaeus, 1758. However, as a matter of history, we record that Linnaeus described this species almost a century before it was rediscovered, and can only regret that his description and figure were not accurate enough to gain him the priority of recognition'. In contrast, Kullander (1983, p. 84) noted: 'As already pointed out by Smitt (1892) [sic], the Linnaean specimen is of the species better known as *Polycentrus schomburgkii* Müller & Troschel, 1849 (family Nandidae) ... The species epithet has priority over *P. schomburgkii* Müller & Troschel, *P. tricolor* Gill, 1858 and *Mesonauta surinamensis* Sauvage, 1882' (see para. 7 below). However, Kullander's comment, inappropriately included in an extensive revision of the genus *Cichlasoma* (family CICHLIDAE), has not influenced the use of the name *Polycentrus schomburgkii* during the past nine years (see, for example, Nelson, 1984, p. 314; Hamel, 1987, p. 17; Sterba 1987, p. 674; Antonio Cabré, Kullander & Lasso, A., 1989, p. 138; Bauchot & Dessouter, 1989, p. 24; Eschmeyer, 1990, p. 325; Rucks, 1992, p. 420; Staeck, 1992, p. 584). These authors followed the 135 year-old usage, as was recommended by Fernholm & Wheeler (1983). Only Stawikowski (1992, p. 687) noted Kullander's statement on the priority of the specific name *punctatus* over *schomburgkii*, and urged use of the earlier name; he did not refer to Fernholm & Wheeler's recommendation.

6. *P. schomburgkii* is the only species included in *Polycentrus* and the name has been used from 1848 until the present in very nearly all scientific and popular papers and works and all specialists, ichthyologists as well as aquarists, know Schomburgk's leaf fish by this name. It would cause unnecessary confusion if Linnaeus's name were now to be introduced and, in the interests of stability in the nomenclature, I propose that it be suppressed.

7. In 1858 Gill (pp. 373–374) described a second nominal species of *Polycentrus* as *P. tricolor*, and in 1882 Sauvage (p. 173) proposed *Mesonauta surinamensis*. Both are clearly junior subjective synonyms of *Polycentrus schomburgkii*. The synonymy between *schomburgkii* and *tricolor* was recorded by Regan (1906, p. 378), Eigenmann (1912, p. 522) and Kullander (1983, p. 84), and that between *schomburgkii* and *surinamensis* by Bauchot & Dessouter (1989, p. 24). Günther (1861, p. 370) and Eigenmann & Eigenmann (1891, p. 66) used the name *tricolor* as well as *schomburgkii*, and Jordan (1887, p. 588) used only *tricolor* but, with the exception of these authors, neither of the names *tricolor* and *surinamensis* has been used.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the specific name *punctatus* Linnaeus, 1758, as published in the binomen *Labrus punctatus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Polycentrus* Müller & Troschel, 1848 (gender: masculine), type species by monotypy *Polycentrus schomburgkii* Müller & Troschel, 1848;

(3) to place on the Official List of Specific Names in Zoology the name *schomburgkii* Müller & Troschel, 1848, as published in the binomen *Polycentrus schomburgkii*;

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *punctatus* Linnaeus, 1758, as published in the binomen *Labrus punctatus* and as suppressed in (1) above.

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Case 2868

Hydromantes Gistel, 1848 (Amphibia, Caudata): proposed designation of *Salamandra genei* Temminck & Schlegel, 1838 as the type species

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Abstract. The purpose of this appplication is to conserve the usage of the name *Hydromantes* Gistel, 1848 for a group of five species of salamanders (family PLETHODONTIDAE Gray, 1850) from the mountain areas of north-central and western Italy and southern France; Sardinia; and the mountains of northern and central California, U.S.A. *Hydromantes* is a replacement name which, with one exception (in 1984), has consistently been used during the past 70 years. It is proposed that *Salamandra genei* Temminck & Schlegel, 1838 be designated the type species, in accordance with understanding and usage.

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1. Gistel (1848, p. xi) proposed the replacement name *Hydromantes* for *Geotriton*. He did not cite either the authorship or date of the latter name, noting only 'Unter den Lurchen, besonders den Batrachiern, ist zu ändern ... *Geotriton* in *Hydromantes* ...'. The name *Hydromantes* has been used by many authors during the past 70 years and has been attributed consistently to Gistel (see paras. 5 and 7 below).

2. The first publication of the name *Geotriton* was by Bonaparte in 1831 (p. 151), included in the family SALAMANDRIDAE Gray, 1825; since there was neither a description nor included species the name was a nomen nudum. The name was made available by Bonaparte ([1832], pp. [243] [244], pl. [83]), who adopted it for a subgenus of *Triton* Laurenti, 1768 (the latter was subsequently replaced, as a junior homonym, by *Triturus* Rafinesque, 1815). Bonaparte included in *Geotriton* the single nominal species *Salamandra exigua* Laurenti, 1768 (p. 41, pl. 3, fig. 4), which is thus the type species by monotypy. Subsequently, without referring to his [1832] publication, Bonaparte ([1837], pp. [255] [256], pl. [84] used the name *Geotriton* for '*Geotriton fuscus*', a misidentification of *Salamandra fusca* Laurenti, 1768 (p. 42; a subjective synonym of *S. atra* Laurenti, 1768, p. 42, pl. 1, fig. 2; see, for example, Mertens & Wermuth, 1960, pp. 19, 35 and paras. 4–6 below). The dates of publication ([1832]–[1841]) of the parts of Bonaparte's work were set out by Salvadori (1888). Tschudi (1838, pp. 59, 93, 94, pl. 2, fig. 3) adopted the name *Geotriton* and attributed it to Bonaparte. Tschudi did not cite a date for the name but his text makes it clear that Bonaparte ([1837]) was the source. Tschudi's publication was included in the *Mémoires de la Société des Sciences Naturelles de Neuchâtel* in 1840 but was issued as a separate in 1838; Mertens (1967, p. v) accepted Stejneger's

(1907, p. 6) date of October 1838 for the first appearance of the work. The single species *Geotriton genei* included in the genus by Tschudi was also attributed to Bonaparte. This appears to have been a manuscript name of Bonaparte's which was made available, as *Salamandra genei*, by Temminck & Schlegel (1838, p. 115). Temminck & Schlegel's work has been dated either as January 1838 (Sherborn & Jentink, 1985, p. 150), or as '1838 ... between May and October, probably ... September' (Stejneger, 1907, p. 543), or as 'after May 1838' (Hoogmoed, 1978, p. 92). The genus *Geotriton* was diagnosed by Bonaparte ([1839], p. [263]) among the 'generi Salamandrini'; he again referred to '*G. fuscus*' and noted that he used *Geotriton* in the restricted sense adopted by Tschudi.

3. Schlegel (1844, p. 122, pl. 39, figs. 5–7) subsequently described and illustrated *Salamandra genei* Temminck & Schlegel, 1838. Schlegel, Gray (1850, p. 47) and Duméril & Bibron (1854, p. 112) recorded *genei* as a synonym of '*G. fuscus*' Bonaparte but the two taxa have otherwise been consistently considered as distinct. Gray (1850) placed '*G. fuscus*' in his new family PLETHODONTIDAE.

4. The name *Hydromantes* Gistel, 1848 remained unused until Dunn (1923, p. 40) resurrected it in place of *Geotriton* as used by Bonaparte ([1837]) and Tschudi (1838). Dunn treated *Geotriton* Bonaparte, [1837] as a junior homonym of *Geotriton* Bonaparte, [1832]. He included two European and one American species in the genus: *Hydromantes italicus* Dunn, 1923 (a new name for '*Geotriton fuscus*' as misidentified by Bonaparte ([1837]); see para. 2 above), *Salamandra genei* Temminck & Schlegel, 1838, and *Spelerpes platycephalus* Camp, 1916 (p. 11). Dunn supposed that the name *Hydromantes*, as proposed by Gistel, had been a replacement for '*Geotriton* Tschudi'; he therefore designated *S. genei* as the type species of *Hydromantes*. However, as a replacement for *Geotriton* Bonaparte '1837 not 1832', as cited by Dunn, *G. fuscus* would be the type species (see Gorman, 1964a, p. 1), although this was a misidentification by Bonaparte. Subsequently, Dunn (1926, pp. 344–354) described the genus *Hydromantes* and the three included species, and again cited *genei* as the type. Hoogmoed (1978, pp. 102, 103) recorded that the seven specimens from Sardinia on which the description of *S. genei* was based were in the Nationaal Natuurhistorisch Museum, Leiden and designated an adult male, no. RMNH 2296A, as the lectotype. Hoogmoed commented that this specimen may have been that illustrated by Schlegel (1844, pl. 39, figs. 5–7; see para. 3 above).

5. The name *Hydromantes* Gistel has been universally adopted in the sense of Dunn (1923) and during the last 70 years has been used in both Europe and North America in hundreds of works by dozens of authors. It has appeared in major reference and popular publications as well as in publications on taxonomy. Lanza & Vanni (1981) noted some of the European literature, and Gorman (1964a, 1964b) summarized mostly the American literature up to that time. The evolutionary relationships and biogeography of *Hydromantes* have been discussed by many authors (see, for example, Wake, Maxson & Wurst, 1978, and references in that work). Three American species are currently recognized; they all have protected status under national and state laws and the name *Hydromantes* is therefore cited in governmental regulations. Lanza & Vanni (1981, p. 119) proposed the name *Hydromantoides* (type species *Spelerpes platycephalus* Camp, 1916) for the North American group of species, retaining *Hydromantes* for the European taxa. However, since 1981, with the exception of Dubois (1984; see para. 6 below), *Hydromantes* has

continued to be used for both the North American and European species (see, for example, Frost, 1985, pp. 590, 591; Stebbins, 1985, p. 60; Duellman & Trueb, 1986, p. 508; Collins, 1990, p. 7).

6. Dubois (1984, p. 106) noted that an examination of the parts ([1832], [1837]) of Bonaparte's work showed that in both the author had applied the name *Geotriton* to the same biological species, which was subsequently named *Hydromantes italicus* by Dunn (1923). In the earlier publication ([1832]) Bonaparte thought that the species was that called *Salamandra exigua* by Laurenti (1768), whilst in the later publication ([1837]) Bonaparte considered it to be *S. fusca* Laurenti, 1768. Both were misidentifications. Dubois commented that Bonaparte had therefore introduced only one new generic name, *Geotriton* Bonaparte, [1832], which he had applied successively to two distinct nominal species: 'Le nom générique *Geotriton* qui apparaît dans la combinaison *Geotriton fuscus* dans le travail de Bonaparte (1837) n'est autre que *Geotriton* Bonaparte, 1832'. Dubois noted that *Geotriton* (type species *S. exigua*), and the replacement name *Hydromantes* Gistel, 1848, were junior subjective synonyms of *Triturus* Rafinesque, 1815 (consistently included in the family SALAMANDRIDAE), and that therefore the name *Hydromantes* could not be used for the genus which includes the species *genei* and *italicus*. Dubois commented that it would be possible to submit an application to the Commission to conserve *Hydromantes* by setting aside *S. exigua* as the type species and designating either *genei* or *italicus* as the type. However, he considered that recourse to such action was unjustified. Dubois (1984, pp. 107–109) adopted the name *Hydromantoides* Lanza & Vanni, 1981 in place of *Hydromantes*, included all the American species in the nominotypical subgenus, and introduced the new subgenus *Speleomantes* Dubois, 1984 (type species *Hydromantes italicus* Dunn, 1923) for the European group of species (including *Salamandra genei* Temminck & Schlegel, 1838).

7. Subsequent authors have not adopted Dubois's (1984) nomenclature. Its adoption would cause considerable and unnecessary confusion. As noted in para. 5 above, for the last 70 years authors have used the name *Hydromantes* for a group of species included in the family PLETHODONTIDAE. With few exceptions (e.g. Lanza & Vanni, 1981), both the American and European species have been included (and even Lanza & Vanni's work retained *Hydromantes* for the European species). Dunn (1923, 1926) and subsequent authors have universally credited Gistel (1848) with authorship. With the exception of Gorman (1964a), authors have followed Dunn and recognized *Salamandra genei* Temminck & Schlegel, 1838 as the type species and it is proposed that this be designated the type in accordance with usage.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Hydromantes* Gistel, 1848 and to designate *Salamandra genei* Temminck & Schlegel, 1838 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Hydromantes* Gistel, 1848 (gender: masculine), type species by designation in (1) above *Salamandra genei* Temminck & Schlegel, 1838;

(3) to place on the Official List of Specific Names in Zoology the name *genei* Temminck & Schlegel, 1838, as published in the binomen *Salamandra genei* (specific name of the type species of *Hydromantes* Gistel, 1848).

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Case 2873

Emys Duméril, 1806 (Reptilia, Testudines): proposed conservation

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Abstract. The purpose of this application is the conservation of the turtle generic name *Emys* Duméril, 1806. This has the senior synonym *Emydes* Brongniart, [1805], which has not been used as a valid name and of which suppression is sought. The type species of *Emys* is *Testudo lutaria* Linnaeus, 1758, long treated as a junior synonym of *Emys orbicularis* (Linnaeus, 1758), the European pond turtle.

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1. Duméril (1806, p. 76) made the name *Emys* available by providing a brief description. The entry begins: '3. Les ÉMYDES (*emys*) forment un genre ...'; other genera (e.g. 'Les TORTUES (*testudo*)') were treated similarly. On the next page the genus is referred to as 'Emyde' in a taxonomic key; in context 'Emyde' is used here as a vernacular name like 'Tortue'. No nominal species are mentioned in Duméril's work.

2. Fitzinger (1843, p. 29) designated '*Emys europaea*. Schweigg.' as the type species of *Emys*. The *Emys europaea* of Schweigger (1812, p. 305) is *Testudo europaea* Schneider, 1783 (p. 323). *Testudo europaea* and *T. orbicularis* Linnaeus (1758, p. 198) are regarded as synonyms. Fitzinger's type species designation has been accepted by most authors but is invalid (see below).

3. Bell (1828, p. 515) had earlier specifically given *Emys picta* (*Testudo picta* Schneider, 1812, p. 306, currently *Chrysemys picta*) as the type species of *Emys*. This designation would be highly disruptive of nomenclatural stability: *Emys* would replace *Chrysemys* Gray, 1844 (p. 27) for the widespread North American painted turtle *C. picta*, and *Emys* as always used would need another generic name.

4. Fortunately Bell's type designation is invalid. Lindholm (1929, pp. 281–282, footnote), noting that Duméril (1806) did not mention any nominal species in his genera, pointed out that Froriep (1806, p. 77) had in his German translation of Duméril allocated the two species *Testudo lutaria* Linnaeus, 1758 and *T. ferox* Schneider, 1783 to *Emys*. These two nominal species were the first to be included in the genus and only from them can the type species be selected (Article 69a(i)(1) of the Code). This was done by Lindholm (1929, p. 282, footnote) who designated *T. lutaria* as the type species. Loveridge & Williams (1957, p. 201) also cited *T. lutaria* Linnaeus as the type. Bell's and Fitzinger's designations are invalid because they were not of either of the nominal species included in *Emys* by Froriep.

5. Linnaeus published the two names *Testudo orbicularis* and *T. lutaria* together (1758, p. 198). Modern authors have recognized these two names as synonyms (e.g. Mertens & Wermuth, 1955, p. 349; 1960, p. 63; Loveridge & Williams, 1957, p. 202; Wermuth & Mertens, 1961, p. 79; 1977, p. 26). Their simultaneous publication requires first reviser choice of precedence; this was effected by Mertens & Wermuth

(1960, p. 12) who selected *orbicularis* as the valid name. All modern works (see, for example, Alderton, 1956; Ernst & Barbour, 1989) adopt the name *Emys orbicularis* for the European pond turtle, whose range extends from North Africa through southern Europe to S.W. Asia.

6. A number of early authors credited Brongniart, and not Duméril, as author of *Emys* (e.g. Gray, 1825, p. 210; 1844, p. 14; [1856], p. 19; Bell, 1828, p. 515; Bonaparte, 1830, pp. 141, 161, 164; Fitzinger, 1835, p. 123; 1843, p. 29; Agassiz, 1857, p. 441). Duméril & Bibron (1834, p. 246, footnote), Agassiz (1857, p. 241) and Smets (1889, p. 12) specifically stated that Brongniart used the name *Emys*. However, so far as known the spelling *Emys* does not appear in any of Brongniart's papers.

7. An abbreviated account of Brongniart's classification, published in An VIII of the French Revolutionary calendar (i.e. 23 September 1799 to 22 September 1800), dealt only with higher categories and did not mention generic names. Brongniart's generic names first appeared in two papers at about the same time ([1805], p. 27; 1806, p. 611); the pertinent passage is nearly identical in both papers, and because of its relative briefness and scarcity it is quoted in its entirety ([1805], p. 27):

'2e genre.—Emyde, *emydes*

Les espèces de ce genre ont les doigts distincts, tantôt séparés, tantôt à demi palmés, quelquefois même entièrement palmés; ils sont terminés par des ongles très-crochus.

Les unes ont un nez cyclindrique en forme de tube; leur carapace est molle, et l'animal ne peut y renfermer entièrement ses membres. Telles sont les *E. ferox*, *E. rostrata*, *E. matamata*, etc.

Les autres ont la carapace et le plastron solides, et elles peuvent non seulement se retirer entièrement dessous leur carapace, mais quelquefois même la fermer exactement, par suite de le mobilité des pièces du plastron. Les espèces de cette division ressemblent beaucoup aux tortues proprement dites. On doit y rapporter la tortue bourbeuse, *E. lutaria*; la tortue pensilvanique, *E. pensilvanica*; la tortue à boîte, *E. clausa*, etc.

Les émydes vivent dans l'eau douce; quelques espèces sont carnivores et se nourrissent de poissons et de coquilles'.

A footnote added: 'J'avais donné dans le manuscrit de ce mémoire un autre nom à ce genre; mais j'ai adopté celui qui a été choisi par M. Duméril dans ses *Élémens d'histoire naturelle*'. The work referred to is Duméril (1804), which gave only French vernacular names: p. 233 mentioned 'Les émydes'.

8. Brongniart's [1805] work, a quarto book, was published in An XIII (23 September 1804 to 22 September 1805). The 1806 journal article was published in January 1806; in this the names were capitalized (e.g. TORTUE, *TESTUDO* and EMYDE, *EMYDES*). Brongniart had originally read his paper long before, on 'le premier pluviose An 8' (21 January 1800), using then some other name for *Emydes* (according to the footnote mentioned above).

9. *Emydes* was italicized by Brongniart in 1805 and 1806 and there is no reason to reject its availability; although Sherborn (1925, p. 2151, citing the 1806 reference) was doubtful, Neave (1939, p. 224) listed *Emydes* without comment. *Emydes* Brongniart, [1805] antedates *Emys* Duméril, 1806, but the two names are not necessarily objective synonyms since no type has been selected from among the six included nominal species of *Emydes* (presumably because no one has treated *Emydes* as a valid name).

Two of Brongniart's originally included nominal species of *Emydes* are *E. ferox* and *E. lutaria*, which are the two species placed by Froriep (1806) in *Emys* (see para. 4 above). Each of Brongniart's six nominal species of *Emydes* belongs to an accepted but junior genus, and to adopt it with any one of them as type would be highly disruptive of nomenclatural stability.

10. To conserve *Emys* Duméril, 1806 and to record the correct fixation of its type species the International Commission on Zoological Nomenclature is asked:

(1) to use its plenary powers to suppress the generic name *Emydes* Brongniart, [1805] for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Emys* Duméril, 1806 (gender: feminine), type species by subsequent designation by Lindholm (1929) *Testudo lutaria* Linnaeus, 1758 (a junior subjective synonym of *Testudo orbicularis* Linnaeus, 1758);

(3) to place on the Official List of Specific Names in Zoology the name *orbicularis* Linnaeus, 1758, as published in the binomen *Testudo orbicularis* (senior subjective synonym of the specific name of *Testudo lutaria* Linnaeus, 1758, the type species of *Emys* Duméril, 1806, by the first reviser action of Mertens & Wermuth, 1960);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Emydes* Brongniart, [1805], as suppressed in (1) above.

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Comment on the proposed designation of a neotype for *Achatina erecta* Benson, 1842 (Mollusca, Gastropoda)
(Case 2833; see BZN **49**: 258–260)

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In my application for the conservation of the usage of *Tortaxis* Pilsbry, 1906 by the designation of a neotype for its type species *Achatina erecta* Benson, 1842, which had been misidentified by Pilsbry, I noted (BZN **49**: 258, para. 4) that four syntypes in Calcutta are specimens of *Bulimus gracilis* Hutton, 1834 (the type species of *Allopeas* Baker, 1935).

I have now located four specimens in the Natural History Museum, London (registration nos. 1842.9.30.10–13) which, like those in Calcutta, have documentation verifying their status as syntypes of *Achatina erecta*; inexplicably, however, these are specimens of *Bulimus achatinaceus* Pfeiffer, 1846. The designation of the neotype proposed in my application will thus conserve the specific name of *B. achatinaceus*, in addition to that of *T. erectus* and the usage of *Tortaxis* and *Allopeas*.

Comment on the proposed designation of *Potamolithus rushii* Pilsbry, 1896 as the type species of *Potamolithus* Pilsbry, 1896 (Mollusca, Gastropoda)
(Case 2801; see BZN **49**: 109–111; **50**: 52–53)

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The name *Potamolithus* was established in a paper by Pilsbry & Rush (November 1896). A number of authors (Pilsbry, 1911; Clench & Turner, 1962; Parodiz, 1965a and Pons da Silva & Davis, 1983) have cited the name from the November paper, whilst others (Parodiz, 1955, 1965b and Neave, 1940, p. 880) have explicitly adopted it from the subsequent (December 1896) paper by Pilsbry. The remainder of authors mentioned in para. 3 of the application did not specify the month of publication. However, all authors have cited the name with the authorship as Pilsbry (1896).

The only two revisions (Pilsbry, 1911 and Parodiz, 1965a) of the genus *Potamolithus* adopted *P. rushii* Pilsbry, 1896 as the type species. Thiele (1931, p. 142) and Wenz (1939, p. 574), two important works in malacology which have had much influence, also cited the type as *P. rushii*. The small note by Clench (1948) has been overlooked by all except Zilch (1960) in the past 45 years.

The spirit of the Code is to promote stability in nomenclature and my recommendation is to conserve *P. rushii* as the type species of *Potamolithus*. I therefore agree with the proposals of Lopez Armengol & Manceñido's application.

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Thiele, J. 1931. *Handbuch der Systematischen Weichtierkunde*, Teil. 1. Fischer, Jena.

Reply to comments on the proposed stabilization of usage of the name *Ceratites nodosus* (Mollusca, Ammonoidea)

(Case 2732; see BZN **48**: 31–35, 246; **49**: 145–149, 290; **50**: 54–56, 141–142)

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1. Tozer (BZN **49**: 145–149) has commented at length on my application (BZN **48**: 31–35). However, he has overlooked some points and misinterpreted others, and therefore it is necessary to discuss some important facts.

2. Tozer (para. 3) correctly stated that the authorship of *Ammonites nodosus* has generally been attributed to Bruguière, whose description was based on Scheuchzer (1718). However, in modern times no workers before Rieber & Tozer (1986), for example Philippi (1901), Spath (1934) and Wenger (1957), had seen any original Scheuchzer specimens: they only had his inadequate figure and Bourguet's (1742) redrawing of it (see para. 1 of my application). Philippi (1901), on whose extensive work the 20th century concept of *Ceratites nodosus* is based, made (p. 410) the following comment on this (my translation): 'Scheuchzer's figure is insufficient. The number and form of the lobes and saddles is properly represented in general, but the saddles seem to be distinctly crenulated. Elongated-oval nodes, which do not seem to have any connection with the round, button-shaped external nodes, surround the umbilicus in such a way that Scheuchzer's ammonite has an appearance like an *Aspidoceras*'.

3. As I previously pointed out (BZN **48**: 32, para. 6), due to the inadequacy of Scheuchzer's figure Philippi (pp. 410, 413) interpreted *Ceratites nodosus* as represented by Schlotheim's illustration (not an original specimen, since none were known) of *Ammonites nodosus* (1823, pl. 31, fig. 1): '*Ceratites nodosus* is typified according to Schlotheim's figure, which is of a specimen without body chamber, large moderately involute forms with widely separated bulging ribs, unforked on the last coil and a broad weakly domed venter' (translation; I quoted the original German in para. 6 of my application).

4. As noted above, Philippi (1901) never saw the actual specimen on which Schlotheim had based his figure of *Ammonites nodosus*, which is a phragmocone rediscovered by Urlichs & Mundlos (1987) in Berlin (Museum für Naturkunde, specimen MB: C.774) and illustrated by them (1987, fig. 10). This specimen proved not to match Philippi's concept of *C. nodosus*, but corresponds to *Ceratites (Acanthoceratites) spinosus spinosus* Philippi, 1901 (p. 404). Therefore, we (Urlichs & Mundlos, 1987, p. 7) proposed another specimen (MB: C.785) from the Schlotheim collection as lectotype of *Ceratites nodosus* Schlotheim; this specimen does accord with Schlotheim's figure, Philippi's usage, and the subsequent 20th century concept of *Ceratites nodosus*. We pointed out that our proposal would require ratification by the Commission's plenary powers, and this is requested in my application.

5. It can be seen that Philippi (1901) regarded *Ceratites nodosus* as characterized by Schlotheim's (1823) figure, and not by Scheuchzer's (1718) illustration or by any physical type specimen known to be extant. Contrary to Tozer (BZN **49**: 147, para. 7) and Silberling (BZN **50**: 141–142), almost all subsequent authors, and not just

Urlichs & Mundlos (1987), have followed Philippi in using *Ceratites nodosus* in the sense of Schlotheim's (1823) pl. 31, fig.1. These authors include Riedel (1916), Spath (1934) and Wenger (1957), and I mentioned 14 other works in para. 10 of my application. The only exceptions are in fact Rieber & Tozer (1986) and Tozer in his comment.

6. Tozer (BZN **49**: 148, para. 8) has commented that 'The taxonomy adopted by Urlichs & Mundlos (1987) for the ceratitids of the Upper Muschelkalk is different from that of Schlotheim, Philippi, Spath and Wenger. It is much more elaborate, with recognition of genera, subgenera, species and subspecies'. Naturally more taxa have been described over the decades, and we (Urlichs & Mundlos) followed the species and subspecies of Wenger (1957) with only three exceptions: we renamed a junior objective synonym and separated two previously named species he had synonymized. In all other ways we followed the taxonomy of the above authors, and here again Tozer's remarks are not in accordance with the facts.

7. Rieber & Tozer (1986) and Tozer (BZN **49**: 148, para. 9) have made the mistake of treating the specimen (PIMUZ L/1651), which they rediscovered in Zurich and which was the basis of Scheuchzer's (1718) illustration, as the lectotype of *C. nodosus*. Like Schlotheim's specimen MB: C.774, the origin of his (1823) figure, Scheuchzer's specimen does not belong to *Ceratites nodosus* as understood by Philippi, Spath, Wenger and subsequent authors. It is true that under Article 74c of the Code a lectotype is an original specimen and not an illustration of it, even if the specimen cannot be traced. In the case of *C. nodosus*, however, the modern (last 92 years) concept has not been based on actual specimens, the Scheuchzer and Schlotheim collections being believed lost, but on Philippi's (1901) interpretation of Schlotheim's figure. This essential point has been overlooked by Tozer.

8. '*Ceratites nodosus*' as defined by Tozer would occur in southern Germany in the 'Trochitenkalk' representing the lower part of the Upper Muschelkalk, and not in the overlying 'Nodosus Schichten' for which it is the name-bearing species. Tozer's statement (BZN **49**: 148, para. 9) 'Acceptance of my [Tozer's] proposal [i.e. the Zurich specimen as lectotype] would make it unnecessary to revise the definition of *Ceratites (Ceratites)*' is emphatically not correct. It would necessitate taxonomic revision and renaming of several subgenera and species of the genus *Ceratites* (see BZN **48**: 33 and Urlichs & Mundlos, 1987, p. 33).

9. Neither of the recently rediscovered specimens poorly illustrated by Scheuchzer (1718) and Schlotheim (1823) belongs to *Ceratites (Ceratites) nodosus* as interpreted by Philippi (1901) and subsequently; they are referrable to *Ceratites (Doloceratites)* and *Ceratites (Acanthoceratites)* respectively (see paras. 9 and 6 of my application). In the interest of stability it follows that neither of them should be taken as the name-bearing type of *C. nodosus*, and this is the reason for my application. On the other hand, and contrary to the remarks by Tozer in paras. 7 and 8 of his comment, the Schlotheim specimen (MB: C.785 in the Museum für Naturkunde, Humboldt Universität, Berlin) proposed as lectotype by Urlichs & Mundlos (1987) and in my application does stabilize the 20th century usage of *Ceratites nodosus* in both its taxonomic and stratigraphic aspects (this usage also corresponds to the description of *C. nodosus* by de Haan (1825) when he established the genus *Ceratites*, as I pointed out in para. 5 of the application). I have given the Commission Secretariat a list of 86 works published since 1970 which use the name *Ceratites nodosus* in this

taxonomic sense. Accordingly I reiterate the proposals in my para. 11 (BZN **48**: 33–34); they have been supported by Hahn (BZN **48**: 246), Tichy (BZN **49**: 290) and by Horn and by Strauch & Bertling on BZN **50**: 54.

10. I have seen the comments (BZN **50**: 55–56) on this case by the late R.V. Melville, and shall deal with them separately.

Comment on the proposed conservation of *Styloptocuma* Băcescu & Muradian, 1974 (Crustacea, Cumacea) with designation of *S. antipai* Băcescu & Muradian, 1974 as the type species
(Case 2787; see BZN **49**: 264–265)

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It is unfortunate that Băcescu & Muradian did not specifically designate the one new species in their new genus *Styloptocuma* as the type species. Since they indicated the name of the new species as *Styloptocuma antipai* n.g. n.sp., it seems reasonable to assume that this species was intended to be the type for the new genus. In my recent paper (Watling, 1991), I treated *S. antipai* as the type species, not realizing that a violation of the Code had occurred. The attribution of authorship of this genus to the 40 compilers of the *Zoological Record* would be unreasonable. Therefore, I support the requests made in this case.

Additional reference

Watling, L. 1991. Rediagnosis and revision of some Nannastacidae (Crustacea: Cumacea). *Proceedings of the Biological Society of Washington*, **104**: 751–757.

Comment on the proposed conservation of *Buprestis* Linnaeus, 1758 and *Chrysobothris* Eschscholtz, 1829 (Insecta, Coleoptera) by the designation of *B. octoguttata* Linnaeus, 1758 as the type species of *Buprestis*
(Case 2758; see BZN **50**: 23–26; see also Case 2772, BZN **49**: 120–121)

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Nelson & Barr have clearly and thoroughly stated the case to conserve the name *Buprestis* Linnaeus, 1758 with the type species *B. octoguttata* Linnaeus, 1758. This is necessary to conserve the current and ubiquitous concepts of the genera *Buprestis* and *Chrysobothris* Eschscholtz, 1829.

There is little I can add to the authors' overwhelming logic to retain the names. The beetles are well known, especially popular with collectors and contain several major (and many more minor) pests of agriculture, horticulture and forestry. There is a wealth of literature pertaining to them. To change either name, particularly for the huge genus *Chrysobothris*, would seriously upset nomenclatural stability.

As a collector and researcher of the BUPRESTIDAE for 35 years I lend my wholehearted support to the proposals.

Comments on the proposed conservation of usage of generic names in the BUPRESTIDAE (Insecta, Coleoptera)
(Cases 2837/1 and 2837/2; see **BZN 50**: 27–30, 31–34, 56).

(1) Richard L. Westcott
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In relation to the application to conserve the names *Poecilonota* Eschscholtz, 1829, *Palmar* Schaefer, 1949 and *Scintillatrix* Obenberger, 1956 (Case 2837/1) I agree wholeheartedly with Hans Mühle's proposals. There is nothing to be gained but further confusion by accepting the adoptions of Leraut (1983), even if these are in accord with the Code. The last two names apply only to Old World species and I would certainly defer to Herr Mühle's judgement on what nomenclatural arrangement will promote stability. I had the fortunate opportunity in the summer of 1992 to travel with him and two other European colleagues, both leading researchers on this group, and the proposals were discussed. These entomologists were in accord.

Poecilonota is the only genus of this group represented in the New World and it occurs throughout the United States and Canada and a small portion of northern Mexico. It has not been known here by any other name since LeConte (1859); prior to that the known species were in the catch-all genus *Buprestis*. In his application Mühle omitted all but one reference pertaining to this genus in the New World. However, the name appears widely in the North American literature, the most important recent work being Evans (1957). To change the name would only bring confusion. The case for the Old World species is much more convoluted, but Mühle certainly speaks for the majority there and we are thus all in agreement.

In relation to the names *Melanophila* Eschscholtz, 1829 and *Phaenops* Dejean, 1833 (Case 2837/2), matters are not so clear and I doubt that there is such general agreement. Workers have been incorrect in citing *Buprestis acuminata* (= *appendiculata*) as the type species of *Melanophila*, whereas the valid designation (Westwood, 1838) is *B. tarda* (= *cyanea*) as pointed out by Leraut (1983). I do not see any pressing reason why Leraut's treatment of *Melanophila*/*Phaenops* should not stand. I do not believe that the stable usage of these two names exists, as stated by Mühle, at least in the New World. Part of the problem may lie in that *Phaenops* has largely been used as a subgenus of *Melanophila*, although there is now no question that the *B. cyanea* group is generically distinct from the group of species typified by *B. acuminata*.

Mühle has again omitted the New World references to this group. There are two or three major, and a few minor, forest pests which all appear widely in the New World literature under *Melanophila*, with the exception of Nelson's (1985) adoption of *Phaenops*. Later, Nelson (1989) followed Leraut (1983).

Perhaps this comes down to whether confusion will be caused by adopting the nomenclaturally correct concept for *Melanophila*. I cannot speak for the Old World species because I do not know to what extent any of them are regarded as economically important forest pests, the names of which will therefore have appeared widely in the literature. However, I do know that in some European catalogs both taxa (*Melanophila* and *Phaenops*) have appeared under the banner of the former.

I cast my vote to remain with Leraut's (1983) correct interpretation of the Code for *Melanophila* (i.e. that it should apply to the *cyanea* group); *Phaenops* can properly be placed in its synonymy. Nelson (1989) has clearly stated that the *B. acuminata* group of species (to which Mühle wishes *Melanophila* applied) should now be placed in the genus *Oxypteris* and I do not feel that this causes undue confusion or hardship to anyone. At least in the United States and Canada it will not cause confusion. I therefore propose that priority should dictate the type species and nomenclature of these genera.

Additional references

Evans, D. 1957. A revision of the genus *Poecilonota* in America north of Mexico (Coleoptera: Buprestidae). *Annals of the Entomological Society of America*, **50**(1): 21–37.

Nelson, G.H. 1985. Clarification of the taxonomic status in various genera of the family Buprestidae (Coleoptera). *Coleopterists' Bulletin*, **39**(2): 133–146.

Nelson, G.H. 1989. Remarks on genera of Buprestidae affected by the Leraut (1983) and Cobos (1986) papers (Coleoptera). *Coleopterists' Bulletin*, **43**(4): 393–396.

(2) R.G. Booth

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In answer to Dr Westcott (comment above) I can confirm Mühle's statements (paras. 5 and 6 of the application) that there has been consensus in the European literature on the usage of *Melanophila* Eschscholtz, 1829 and *Phaenops* Dejean, 1833. Apart from Obenberger (1930), who lumped *Phaenops* species under *Melanophila*, all the major European key works and catalogues have consistently treated *Phaenops* (the *cyanea* group of species) as a separate genus from *Melanophila* (with *acuminata* De Geer or its synonym *appendiculata* Fabricius being accepted, albeit incorrectly, as the type species). These works include Lacordaire (1857), Gemminger & Harold (1869), Kerremans (1903), Reitter (1911), Schaefer (1949), Freude, Harde & Lohse (1979), Cobos (1986) and Bílý (1989), which were all mentioned in the application, and also Portevin (1931). Leraut's (1983) proposals transfer the name *Melanophila* to the genus called *Phaenops* and, for example, change the familiar *Melanophila acuminata* (De Geer), of current, longstanding use, to the unknown *Oxypteris acuminata*. I therefore support Mühle's application to conserve the longstanding usage of *Melanophila* and *Phaenops*.

In the application (para. 8) the gender of the name *Phaenops* was stated to be feminine. However, Article 30a(ii) of the Code makes a blanket requirement for all names ending in *-ops* to be of masculine gender. To my knowledge all workers, including its author (Dejean, 1833), have consistently treated *Phaenops* as feminine, and I therefore propose that the Commission be asked to sanction the continuing use of the feminine gender for the name.

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that the gender of the generic name *Phaenops* Dejean, 1833 is feminine;

(2) to place on the Official List of Generic Names in Zoology the name *Phaenops* Dejean, 1833 (gender: feminine, as ruled in (1) above), type species by designation by Théry (1942) *Buprestis cyanea* Fabricius, 1775.

Additional references

Obenberger, J. 1930. Buprestidae 2. Pp. 215–568 *in* Junk, W. & Schenkling, S. (Eds.), *Coleopterorum catalogus*, vol. 111. Junk, Berlin.

Portevin, G. 1931. *Histoire naturelle des coléoptères de France*, vol. 2 (Polyphaga: Lamellicornia, Palpicornia, Diversicornia). Encyclopédie Entomologique 13. Lechevalier, Paris.

Comment on the proposed conservation of the specific name of *Cryptophagus advena* Waltl, 1834 (currently *Ahasverus advena*; Insecta, Coleoptera)
(Case 2846; see BZN **50**: 20–22)

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Ahasverus advena (Waltl, 1834) is one of several cosmopolitan species found in stored products which are frequently submitted to the International Institute of Entomology for identification. In the interests of stability I strongly support the conservation of the specific name.

Comments on the proposed conservation of usage of the mosquito names *Aedes* (*Neomelaniconion*) *albothorax*, *A.* (*N.*) *circumluteolus* and *A.* (*N.*) *mcintoshi* (Insecta, Diptera)
(Case 2852; see BZN **50**: 39–43)

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I strongly concur with the conservation of these specific names. Since 1980 I have been studying the biology of these ground-pool *Aedes* as it relates to the ecology of Rift Valley fever virus in sub-Saharan Africa. I have published extensively using these names (although before 1986 treating *A. mcintoshi* under the name *A. lineatopennis*). I have given the Commission Secretariat a list of 25 such papers of which I am an author. Strict application of priority would require changing the names of all three species, thereby confusing understanding of their biology and their role in the maintenance and transmission of Rift Valley fever virus.

(2) John F. Reinert

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As a mosquito systematist and biologist for over 27 years, I support Zavortink's proposals. They bring needed stability to the names of a taxonomically complex group of mosquitoes whose members have been incriminated in the transmission of human pathogens.

(3) P.G. Jupp
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I would like to support this application, particularly the conservation of the names of *Ae.* (*N.*) *circumluteolus* and *Ae.* (*N.*) *mcintoshi*. Both these species are important vectors of arboviruses and it would cause unnecessary ambiguity if their names were changed.

Ae. circumluteolus has been incriminated as vector of several arboviruses, notably Wesselbron, Bunyamwera, Pongola, Spondweni and Rift Valley fever viruses. I have given the Commission Secretariat a list of six references.

Comment on the proposal to conserve *Oecothea* Haliday in Curtis, 1837 and to designate *Helomyza fenestralis* Fallén, 1820 as the type species (Insecta, Diptera) (Case 2836; see BZN **50**: 44–47)

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We support the basic intent of this application, but some corrections and comments are needed.

1. The Commission need not use its plenary powers to rule on what is already true under the Code. Hence proposal (1)(a) is superfluous and should be deleted from the application. Thompson & Mathis (1980, p. 86) clearly documented that the name *Oecothea* Haliday is available from Curtis (1837) under the provisions of Article 11d of the then current Code (11e of the present edition).

2. While Thompson & Mathis (1980) did use the word 'lapsus' in association with the spelling *Aecothea*, they did so only after declaring the name 'an unjustified emendation of *Oecothea*'. Their conclusion was the same as Woźnica & Zatwarnicki's suggestion (their para. 2).

3. The statements by Woźnica & Zatwarnicki (para. 1) that 'it is not clear that the four species ... were originally included' and '... *Oecothea* Haliday was proposed without any clearly included species' are disputed in Curtis's own words, as was clearly outlined by Thompson & Mathis (1980, p. 82). The only thing that is not explicit, but in retrospect is now obvious to us, is the association of the specific name *fenestralis* Fallén with *Oecothea*. Clearly, the four species that immediately follow *Oecothea* in the Addenda were associated with that name by Curtis. The key phrase in Curtis's own words (p. vi) is '... although many of the former [= synonyms] which intersect long genera will most probably be eventually adopted, and it may often

happen that *all* the species following such generic names would not be considered by the Author who proposed the name as belonging to his group, the one *immediately* following is always a typical species ...'. In his Addenda Curtis placed the name *Oecothea* after species 17, which meant that *Oecothea* was inserted immediately in front of species 18, *fenestralis* Fallén. Hence, as *fenestralis* Fallén is the one immediately following *Oecothea*, it was a 'typical species'.

4. Woźnica & Zatwarnicki say that 'the absence of the species numbered between 18 and 23 meant that the precise position at which *Oecothea* related to the main text was not indicated'. However, as stated in his introduction, Curtis dealt with large Diptera genera by using the numbers of Meigen. There are gaps as there were many species in Meigen that were not known from Britain.

5. In conclusion, we endorse the application to establish formally what Curtis originally intended, which was to credit the name *Oecothea* to Haliday and to have *Helomyza fenestralis* Fallén, 1820 as the type species.

Comments on the proposed designation of a neotype for *Coelophysis bauri* (Cope, 1887) (Reptilia, Saurischia)
(Case 2840; see BZN **49**: 276–279; **50**: 147–151)

(1) Hilde L. Schwartz
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I would like to express my support for the purpose of the application by Colbert et al., that is, to conserve the name *Coelophysis bauri* and to reject *Rioarribasaurus colberti* Hunt & Lucas, 1991. My own research on New Mexican Triassic rocks reveals no stratigraphic justification for the new genus *Rioarribasaurus*, and the additional considerations of priority and widespread current usage I believe make the name *Rioarribasaurus colberti* a source of taxonomic confusion rather than clarification.

(2) R.E. Molnar
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I wish to present an argument distinct from, and more philosophical than, those presented by Colbert et al. in their application, which I support. To me there seems a basic philosophic and methodologic difference between the approach of Colbert to the taxonomy of *Coelophysis* and that of Hunt & Lucas. Colbert seems to subscribe to the school of taxonomy very largely influenced by G.G. Simpson and E. Mayr in which fossils are recognized as only examples which have been 'selected' from a population of living organisms. These living organisms varied among themselves, and hence recognition of diagnostic characters of a taxon, and referral of future discoveries to the taxon, depend on the character states as exhibited by the hypodigm, of which the type specimen is the name-bearer. In organisms exhibiting marked sexual dimorphism, for example, the holotype might be a male specimen and yet females have the same operational significance as males.

Hunt & Lucas, on the other hand, seem to subscribe to a more typological school of thought, emphasizing the necessity of the use of the holotype alone in identification (Hunt & Lucas, 1991, p. 194). Since the importance of the population in evolution is well established, and no appreciation of the degree of variation in a population can be obtained from examination of any single specimen (holotype or not) alone, it is clear that use of the holotype in this fashion will lead to 'over-splitting' of fossil taxa and an unnecessary proliferation of names. This would result in a lack of congruence between actual taxa and their names. The ramifications extend beyond the taxonomy of Triassic saurischians.

Personally, I believe the appropriate action to maintain stability of nomenclature and taxonomic practice is to support the recommendations of Colbert et al. To introduce the name *Rioarribasaurus colberti* implies supporting an at least quasi-typological view of taxonomy, inconsistent with the importance of utilising populations in the study of taxonomy.

Clearly the original specimens of *Coelophysis* were deemed diagnostic around the turn of the century by competent taxonomists such as Cope, Hay and von Huene. Also clearly, they are not now deemed so by competent taxonomists such as Padian, Colbert et al. and Hunt & Lucas. However, should this not involve the acceptance of new type material rather than erecting a new name? The latter practice would lead to changing of name every time a new taxonomic feature is recognized.

I believe these factors should be carefully considered, and that such consideration will lend support to the proposals of Colbert et al. on BZN **49**: 278.

(3) Zdeněk V. Špinar
Prysk 66, 471 15, Czech Republic

I strongly support the conservation of the very well established usage of the name *Coelophysis bauri*, as proposed in the application by Colbert et al.

(4) Thomas R. Holtz, Jr.
Geological Survey, United States Department of the Interior, MS 970, National Center, Reston, Virginia 22092, U.S.A.

1. As a theropod worker, I write concerning the proposed replacement of the lectotype of *Coelophysis bauri* by a neotype. Although Hunt & Lucas (1991) were correct in observing that the lectotype of *C. bauri* is indeed nondiagnostic to the specific level, I do not believe that their solution (creation of the name *Rioarribasaurus colberti* for the Ghost Ranch specimens) best serves the paleontological community.

2. Some authors may write citing the widespread use of the name *Coelophysis* for the Ghost Ranch dinosaurs in the popular literature. However, I believe that the transfer of type suggested in Case 2840 can be supported on technical grounds. Note that some of these points are reiterations of the observations and suggestions raised by Colbert et al.

3. Since the late 1940s the concept of *Coelophysis* in the technical literature has been almost entirely based on the Ghost Ranch specimens. From a spectacular site which preserves hundreds of articulated specimens of many growth stages, the Ghost

Ranch specimens have made *Coelophysis bauri* the theropod dinosaur with the best potential for paleopopulational and ontogenetic studies. Likewise, it is one of the few theropods for which the entire anatomy (including individual, ontogenetic and possibly sexual variation) is known. Thus, in studies such as those by Rowe & Gauthier (1990) and myself (Holtz, in press), the Ghost Ranch *Coelophysis* specimens allow a phylogenetic framework to be constructed for other ceratosaurian theropods. In fact, I have proposed (in press) the clades COELOPHYSIDAE and COELOPHYSOIDEA, with the type form based on the Ghost Ranch dinosaur.

4. Had Cope himself designated a type specimen, I would agree with Hunt & Lucas and would support the name *Rioarribasaurus*. However, as Padian (1986), Hunt & Lucas (1991) and Colbert et al. have all described, the nomenclatural history of *Coelophysis bauri* is confused. As the Commission is enabled to deal with situations of this kind, and a complete specimen exists from a large population which many authors have agreed comes from the same species, I believe that the proposed designation of AMNH 7224 as neotype of *C. bauri* is supportable and desirable.

5. Although Hunt & Lucas (1991) proposed a new name for the Ghost Ranch specimens, they did not dispute that these and the type material of *Coelophysis bauri* come from the same species. On p. 195, in fact, they suggested that the reason the Commission should not be petitioned to designate a neotype was not due to biological differences between the lectotype (vertebral specimen AMNH 2722) and *Rioarribasaurus*, but rather that such a petition would be met with rejection because type material is extant. With the addition of stratigraphic evidence showing that the original *Coelophysis* material and the Ghost Ranch quarry are from the same stratigraphic horizon (Schwartz & Gillette, in press), the case that the complete specimen AMNH 7224 and the specimens described by Cope in the 1880s are from the same species is strengthened.

6. Thus, it is my opinion that the adoption of the Ghost Ranch skeleton AMNH 7224 as the neotype of *Coelurus bauri* (now *Coelophysis bauri*) is justifiable and warranted.

(5) Farish A. Jenkins, Jr.
Museum of Comparative Zoology, Harvard University, 26 Oxford Street, Cambridge, Massachusetts 02138, U.S.A.

I write in support of the well-reasoned proposal by Colbert et al. to retain the current usage of *Coelophysis bauri* as the correct name for the small Triassic dinosaur originally described by Cope in 1887 and redescribed, referenced, analyzed or otherwise cited by many authors over a century's time.

There is no question in my mind that unnecessary confusion, in addition to dull verbiage, would result by adopting the proposal by Hunt & Lucas (1991) of the name *Rioarribasaurus colberti*. The claims of Hunt & Lucas are largely vacuous; there is no compelling evidence that the Ghost Ranch material is in any way different from the vast selection of other materials by which *Coelophysis bauri* is so well known.

Coelophysis bauri is a taxon central to our understanding of the early development of diversification of theropod dinosaurs. Materials of this species are abundantly represented in six major museums of the United States mentioned in para. 6 of

Colbert et al., which include the Museum of Comparative Zoology at Harvard University; reference to these specimens, invariably cited as *Coelophysis bauri*, appears repeatedly in the literature.

To substitute a new name for a taxon, universally recognized by vertebrate paleontologists, on the basis of the dubious claims of Hunt & Lucas (1991) would make a travesty of good sense, not to mention sound taxonomic practice. With no little sense of urgency, I beg the Commission to adopt the proposal set forth in BZN **49**: 278, para. 11.

OPINION 1738

Mopsea Lamouroux, 1816 (Cnidaria, Anthozoa): *Isis encrinula* Lamarck, 1815 designated as the type species

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Mopsea* Lamouroux, 1816 are hereby set aside and *Isis encrinula* Lamarck, 1815 is designated as the type species.

(2) The name *Mopsea* Lamouroux, 1816 (gender: feminine), type species by designation under the plenary powers in (1) above *Isis encrinula* Lamarck, 1815, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *encrinula* Lamarck, 1815, as published in the binomen *Isis encrinula* (specific name of the type species of *Mopsea* Lamouroux, 1816) and as defined by the lectotype (specimen labelled '*Isis encrinula*. Lk. *Mopsea verticillaris*. Lamx. De La N[ouv]elle Hollande par MM Péron and Lesueur 1809' in the Muséum National d'Histoire Naturelle, Paris, illustrated and described by Bayer & Stefani, 1987), designated by Alderslade (1992), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2788

An application for the designation of *Isis encrinula* Lamarck, 1815 as the type species of *Mopsea* Lamouroux, 1816 was received from Dr Philip Alderslade (*Northern Territory Museum of Arts and Sciences, Darwin, Australia*) on 31 August 1990. After correspondence the case was published in BZN **49**: 104–108 (June 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 107. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Trjapitzin, Willink

Negative votes — 1: Thompson.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Thompson considered the application to be unnecessary because there were valid type species designations for *Mopsea* Lamouroux, 1816 which predated that of *Isis dichotoma* Linnaeus, 1758 by Milne Edwards & Haime (1850), such as that by Dujardin ([1846], p. 342). The latter designated the originally included nominal species *M. verticillata* Lamouroux, 1816 as the type, and at the same time mentioned the synonymy of *M. verticillata* and *I. encrinula* Lamarck, 1815.

Dujardin, F. [1846]. *Mopsea*. P. 342 *in* d'Orbigny, C. (Ed.), *Dictionnaire universel d'histoire naturelle*, vol. 8. 766 pp. Paris.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

encrinula, *Isis*, Lamarck, 1815, *Mémoires du Muséum d'Histoire Naturelle*, **1**: 415.

Mopsea Lamouroux, 1816, *Histoire des Polypiers coralligènes flexibles, vulgairement nommés Zoophytes*, p. 465.

The following is the reference for the designation of the lectotype of *Isis encrinula* Lamarck, 1815:

Alderslade, P. 1992. *BZN* **49**: 104.

The following is the reference for the description and illustration of *Isis encrinula* Lamarck, 1815:

Bayer, F. M. & Stefani, J. 1987. *Bulletin du Muséum National d'Histoire Naturelle*, (4)**9**(A,1): pl. 18, fig. 1.

OPINION 1739

Strombiformis albus Da Costa, 1778 (currently *Melanella* (*Balcis*) *alba*; Mollusca, Gastropoda): specific name conserved

Ruling

(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(a) *laevis* Pennant, 1777, as published in the binomen *Turbo laevis*;

(b) *albus* Pennant, 1777, as published in the binomen *Turbo albus*.

(2) The name *Balcis* Leach in Gray, 1847 (gender: feminine), type species by monotypy *Balcis montagui* Leach in Gray, 1847 (a junior subjective synonym of *Strombiformis albus* Da Costa, 1778), is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *albus* Da Costa, 1778, as published in the binomen *Strombiformis albus* and as defined by the neotype designated by Warén (1989) (senior subjective synonym of the specific name of *Balcis montagui* Leach in Gray, 1847, the type species of *Balcis* Leach in Gray, 1847), is hereby placed on the Official List of Specific Names in Zoology.

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *laevis* Pennant, 1777, as published in the binomen *Turbo laevis* and as suppressed in (1)(a) above;

(b) *albus* Pennant, 1777, as published in the binomen *Turbo albus* and as suppressed in (1)(b) above.

History of Case 2526

An application involving the conservation of the specific name of *Strombiformis albus* Da Costa, 1778 was received from Dr Anders Warén (*Naturhistoriska Riksmuseet, Stockholm, Sweden*) on 19 June 1985. After correspondence the present case was published in BZN **49**: 112–115 (June 1992). Notice of the case was sent to appropriate journals.

A comment in support from Dr Riccardo Giannuzzi-Savelli (*Palermo Pallavicino, Italy*) was published in BZN **49**: 289–290 (December 1992).

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 114. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Heppell, Hahn, Halvorsen, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Thompson, Trjapitzin, Willink

Negative votes — 2: Holthuis and Štys.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Holthuis commented: 'I do not agree that the type species of *Balcis* Leach in Gray, 1847 is *Balcis montagui* = *Helix polita* sensu Montagu (1803). The genus was established merely by the sentence '*Balcis Montagui. Helix polita* Mont.' (para. 7 of the application). There is no indication that Leach meant anything else but the nominal species cited by Montagu, i.e. *Turbo politus* Linnaeus, 1758, and therefore *T. politus* Linnaeus is the type species of *Balcis*'. (*Editorial note*. As noted in paras. 4 and 6 of the application, a number of early authors misidentified *T. politus* Linnaeus. The species described under the name *H. polita* by Montagu (1803) in his *Testacea Britannica* was considerably larger than Linnaeus's Mediterranean taxon. Leach, in an [1820] work published posthumously by Gray (1852; reference below), synonymised '*Helix polita* Pulteney' (1799, 1813), '*polita* Montagu' (1803, 1808) and '*polita* Maton & Rackett' (1807; reference below) with *Turbo laevis* Pennant and *Strombiformis albus* Da Costa. All these nominal species were described in works on the British fauna. *Turbo politus* Linnaeus, as long understood, is a Mediterranean species which does not occur in the British Isles; the neotype (designated by Warén, 1988; para. 7 of the application) is from Tunisia. The conservation of this neotype following recent discoveries of Linnaean specimens has been proposed in BZN **50**: 107–111).

Leach, W.E. 1852. *In* Gray, J.E. (Ed.), *A synopsis of the Mollusca of Great Britain*. 376 pp., pls. 2–13. Van Voorst, London.

Maton, W.G. & Rackett, T. 1807. A descriptive catalogue of the British Testacea. *Transactions of the Linnean Society of London*, **8**: 17–250.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

albus, *Strombiformis*, Da Costa, 1778, *Historia Naturalis testaceorum Britanniae or, the British conchology* ..., p. 116.

albus, *Turbo*, Pennant, 1777, *British zoology*, Ed. 4, vol. 4, p. 130. (Octavo edition).

Balcis Leach in Gray, 1847, *Annals and Magazine of Natural History*, **20**(133): 271.

laevis, *Turbo*, Pennant, 1777, *British zoology*, Ed. 4, vol. 4, p. 130. (Octavo edition).

The following is the reference for the designation of the neotype of *Strombiformis albus* Da Costa, 1778:

Warén, A. 1989. *Journal of Conchology*, **33**(4): 222.

OPINION 1740

Amicytheridea Bate, 1975 (Crustacea, Ostracoda): *A. triangulata* Bate, 1975 designated as the type species

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Amicytheridea* Bate, 1975 are hereby set aside and *Amicytheridea triangulata* Bate, 1975 is designated as type species.

(2) The name *Amicytheridea* Bate, 1975 (gender: feminine), type species by designation under the plenary powers in (1) above *Amicytheridea triangulata* Bate, 1975, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *triangulata* Bate, 1975, as published in the binomen *Amicytheridea triangulata* (specific name of the type species of *Amicytheridea* Bate, 1975), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2789

An application for the designation of *Amicytheridea triangulata* Bate, 1975 as the type species of *Amicytheridea* Bate, 1975 was received from Drs S.C. Khosla, S.R. Jakhar & M.H. Mohammed (*M.L. Sukhadia University, Udaipur, India*) on 13 September 1990. After correspondence the case was published in BZN **49**: 116–117 (June 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 117. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — none.

Bouchet abstained.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Amicytheridea Bate, 1975, *Bulletin of the British Museum (Natural History)*, Geology, **26**(5): 190.

triangulata, *Amicytheridea*, Bate, 1975, *Bulletin of the British Museum (Natural History)*, Geology, **26**(5): 192.

OPINION 1741

Gerris paludum Fabricius, 1794 (currently *Aquarius paludum*; Insecta, Heteroptera): specific name conserved

Ruling

(1) Under the plenary powers the name *alatus* Retzius, 1783, as published in the trinomen *Cimex najas* var. *alatus*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *paludum* Fabricius, 1794, as published in the binomen *Gerris paludum* and as defined by the lectotype designated by Andersen (1990), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *alatus* Retzius, 1783, as published in the trinomen *Cimex najas* var. *alatus* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2794

An application for the conservation of the specific name of *Gerris paludum* Fabricius, 1794 was received from Dr N. Møller Andersen (*Zoologisk Museum, University of Copenhagen, Copenhagen, Denmark*) on 15 October 1990. After correspondence the case was published in BZN **49**: 118–119 (June 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 118–119. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — 1: Lehtinen.

No votes were received from Kabata, Starobogatov and Uéno.

Ride was on leave of absence.

Lehtinen considered that priority should apply; the type material of *Cimex alatus* Retzius, 1783 probably exists (para. 3 of the application), and the synonymy of the name with *Gerris paludum* Fabricius, 1794 had been interpreted by a well known specialist (O.M. Reuter). Thompson commented that most entomologists had ignored the names published in Retzius (1783) because they believed the work not to be consistently binominal.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

alatus, *Cimex najas* var., Retzius, 1783, *Caroli De Geer genera et species insectorum*, p. 89.

paludum, *Gerris*, Fabricius, 1794, *Entomologia systematica emendata et aucta*, vol. 4, p. 188.

The following is the reference for the designation of the lectotype of *Gerris paludum* Fabricius, 1794:

Andersen, N.M. 1990. *Steenstrupia*, **16**: 59.

OPINION 1742

Lincus Stål, 1867 (Insecta, Heteroptera): conserved; *L. croupius* Rolston, 1983: specific name not conserved

Ruling

(1) Under the plenary powers the generic name *Audinetella* Spinola, 1850 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Lincus* Stål, 1867 (gender: masculine), type species by monotypy *Pentatoma rufospilota* Westwood, 1837, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *rufospilota* Westwood, 1837, as published in the binomen *Pentatoma rufospilota* (specific name of the type species of *Lincus* Stål, 1867) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Audinetella* Spinola, 1850, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2798

An application for the conservation of the generic name *Lincus* Stål, 1867 by suppressing the unused senior subjective synonym *Audinetella* Spinola, 1850, and for the conservation of the specific name of *L. croupius* Rolston, 1983 by suppressing the senior subjective synonym *A. bipunctata* Spinola, 1850, was received from Dr L.H. Rolston (*Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center, Baton Rouge, Louisiana, U.S.A.*) on 5 November 1990. After correspondence the case was published in BZN **49**: 19–21 (March 1992). Notice of the case was sent to appropriate journals.

A comment from Prof L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*), published in BZN **49**: 229–230 (September 1992), supported conservation of the generic name *Lincus* but not the specific name of *L. croupius*. A reply by the author of the application was published at the same time.

The proposals to conserve the generic name *Lincus* (para. 5, proposals (1)(a), (2), (3)(a) and (4) on BZN **49**: 20) and the specific name of *L. croupius* (proposals (1)(b), (3)(b) and (5) on BZN **49**: 20) were offered separately for voting.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote. At the close of the voting period on 1 June 1993 the votes were as follows:

Proposals (1)(a), (2), (3)(a) and (4) on BZN **49**: 20. Affirmative votes — 24: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — 2: Lehtinen and Savage.

Proposals (1)(b), (3)(b) and (5) on BZN **49**: 20. Affirmative votes — 7: Bock, Bouchet, Cocks, Corliss, Halvorsen, Nielsen, Savage

Negative votes — 17: Bayer, Cogger, Dupuis, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Minelli, Nye, Schuster, Štys, Thompson and Trjapitzin.

Martins de Souza and Willink voted on the proposals to conserve the generic name *Lincus* but abstained from voting on the specific name.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Voting against the conservation of both *Lincus* Stål, 1867 and *Lincus croupius* Rolston, 1983, Lehtinen commented that since *croupius* was published only a few years ago it could not compete with the much older and interpretable name *bipunctata* Spinola, 1850.

The required two-thirds majority was reached for the conservation of the generic name *Lincus*, but the conservation of the specific name of *croupius* Rolston, 1983 was not accepted and it has the status of a junior subjective synonym of *bipunctata* Spinola, 1850.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Audinetella Spinola, 1850, *Tavola sinottica dei generi spettanti alla classe degli insetti arthrodignati Hemiptera Linn., Latr. Rhyngota Fabr., Rhynchota Burm.*, p. 86.

Lincus Stål, 1867, *Öfversigt af Kongliga Svenska Vetenskaps-Akademiens Förhandlingar*, **24**(7): 524.

rufospilota, *Pentatoma*, Westwood, 1837, *A catalogue of Hemiptera in the collection of the Rev. F.W. Hope with short Latin descriptions of new species*, part 1, p. 44.

OPINION 1743

TACHINIDAE Fleming, 1821 (Insecta, Coleoptera): spelling emended to TACHINUSIDAE to remove homonymy with TACHINIDAE Robineau-Desvoidy, 1830 (Insecta, Diptera), and TACHYPORIDAE MacLeay, 1825 (Insecta, Coleoptera): given precedence over TACHINUSIDAE Fleming, 1821

Ruling

(1) Under the plenary powers:

(a) it is hereby ruled that for the purposes of Article 29 the stem of the generic name *Tachinus* Gravenhorst, 1802 is TACHINUS-;

(b) family-group names based on *Tachyporus* Gravenhorst, 1802 are hereby given precedence over those based on *Tachinus* Gravenhorst, 1802.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Tachina* Meigen, 1803 (gender: feminine), type species by subsequent designation by Brauer (1893) *Musca grossa* Linnaeus, 1758;

(b) *Tachinus* Gravenhorst, 1802 (gender: masculine), type species by subsequent designation by Latreille (1810) *Staphylinus rufipes* Linnaeus, 1758;

(c) *Tachyporus* Gravenhorst, 1802 (gender: masculine), type species by subsequent designation by Latreille (1810) *Staphylinus chrysomelinus* Linnaeus, 1758.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *grossa* Linnaeus, 1758, as published in the binomen *Musca grossa* (specific name of the type species of *Tachina* Meigen, 1803);

(b) *rufipes* Linnaeus, 1758, as published in the binomen *Staphylinus rufipes* (specific name of the type species of *Tachinus* Gravenhorst, 1802);

(c) *chrysomelinus* Linnaeus, 1758, as published in the binomen *Staphylinus chrysomelinus* (specific name of the type species of *Tachyporus* Gravenhorst, 1802).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) TACHINIDAE Robineau-Desvoidy, 1830, type genus *Tachina* Meigen, 1803 (Insecta, Diptera);

(b) TACHINUSIDAE Fleming, 1821 (spelling emended in (1)(a) above), type genus *Tachinus* Gravenhorst, 1802 (Insecta, Coleoptera), with the endorsement that it and other family-group names based on *Tachinus* are not to be given priority over those based on *Tachyporus* Gravenhorst, 1802;

(c) TACHYPORIDAE MacLeay, 1825, type genus *Tachyporus* Gravenhorst, 1802 (Insecta, Coleoptera), with the endorsement that it and other family-group names based on *Tachyporus* are to be given precedence over those based on *Tachinus* Gravenhorst, 1802.

(5) The name TACHINIDAE Fleming, 1821 (spelling emended in (1)(a) above to TACHINUSIDAE) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Case 2786

An application to remove the homonymy between the family-group names TACHINIDAE Fleming, 1821 (Coleoptera) and TACHINIDAE Robineau-Desvoidy, 1830 (Diptera), and to conserve TACHYPORIDAE MacLeay, 1825 (Coleoptera) by giving it precedence over TACHINUSIDAE Fleming, 1821, was received from Drs Alfred F. Newton, Jr. and Margaret K. Thayer (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*) and Curtis W. Sabrosky (*Systematic Entomology Laboratory, U.S. Department of Agriculture, Washington, D.C., U.S.A.* (present address: *Medford, New Jersey, U.S.A.*)) on 28 August 1990. After correspondence the case was published in BZN **49**: 122–126 (June 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that more than half of the representative list of 50 references held by the Commission Secretariat demonstrating usage of family-group names based on *Tachyporus* Gravenhorst, 1802 (para. 3 of the application) were published in the last 50 years.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 123–124. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet (part), Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — none.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Bouchet voted for the removal of the homonymy between TACHINIDAE Fleming, 1821 (Coleoptera) and TACHINIDAE Robineau-Desvoidy, 1830 (Diptera), but against giving TACHYPORIDAE MacLeay, 1825 (Coleoptera) precedence over TACHINUSIDAE Fleming, 1821.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

chrysomelinus, *Staphylinus*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 423.

grossa, *Musca*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 596.

rufipes, *Staphylinus*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 423.

Tachina Meigen, 1803, *Magazin für Insektenkunde (Illiger)*, **2**: 280.

TACHINIDAE Fleming, 1821, *in*: *Supplement to the fourth, fifth and sixth editions of the Encyclopaedia Britannica*, vol. 5, p. 49 (an incorrect original spelling of TACHINUSIDAE).

TACHINIDAE Robineau-Desvoidy, 1830, *Mémoires présentés par divers savants à l'Académie Royale des Sciences de l'Institut de France*, (2)**2**: 185.

Tachinus Gravenhorst, 1802, *Coleoptera microptera Brunsvicensia* ..., p. 134.

TACHINUSIDAE Fleming, 1821, *in*: *Supplement to the fourth, fifth and sixth editions of the Encyclopaedia Britannica*, vol. 5, p. 49 (incorrectly spelled as TACHINIDAE).

TACHYPORIDAE MacLeay, 1825, *Annulosa Javanica*, no. 1, p. 49.

Tachyporus Gravenhorst, 1802, *Coleoptera microptera Brunsvicensia* ..., p. 124.

The following is the reference for the designation of *Musca grossa* Linnaeus, 1758 as the type species of the nominal genus *Tachina* Meigen, 1803:

Brauer, F. 1893. *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien*, **43**: 489.

The following is the reference for the designation of *Staphylinus rufipes* Linnaeus, 1758 as the type species of the nominal genus *Tachinus* Gravenhorst, 1802, and for the designation of *Staphylinus chrysomelinus* Linnaeus, 1758 as the type species of the nominal genus *Tachyporus* Gravenhorst, 1802:

Latreille, P.A. 1810. *Considérations générales sur l'ordre naturel des animeaux composants les classes des crustacés, des arachnides, et des insectes...* , p. 427.

OPINION 1744

Cheilosia Meigen, 1822 and *Pyrophaena* Schiner, 1860 (Insecta, Diptera): conserved

Ruling

(1) Under the plenary powers:

(a) the generic name *Cheilosia* Panzer, [1809], and all uses of the name *Cheilosia* prior to the publication of *Cheilosia* Meigen, 1822, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;

(b) all fixations of type species for the nominal genus *Cheilosia* Meigen, 1822 prior to the designation by Coquillett (1910) of *Syrphus flavipes* Panzer, 1798 are hereby set aside.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Cheilosia* Meigen, 1822 (gender: feminine), type species by subsequent designation by Coquillett (1910) *Syrphus flavipes* Panzer, 1798, as ruled in (1)(b) above;

(b) *Pyrophaena* Schiner, 1860 (gender: feminine), type species by monotypy *Syrphus rosarum* Fabricius, 1787.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *flavipes* Panzer, 1798, as published in the binomem *Syrphus flavipes* (specific name of the type species of *Cheilosia* Meigen, 1822);

(b) *rosarum* Fabricius, 1787, as published in the binomem *Syrphus rosarum* (specific name of the type species of *Pyrophaena* Schiner, 1860).

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Cheilosia* Panzer, [1809], as suppressed in (1)(a) above;

(b) *Chilosia* Agassiz, 1846 (an unjustified emendation of *Cheilosia* Meigen, 1822).

History of Case 2730

An application for the conservation of *Cheilosia* Meigen, 1822 and *Pyrophaena* Schiner, 1860 was received from Dr A.V. Barkalov (*Biological Institute, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia*) and Prof I.M. Kerzhner (*Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia*) on 22 June 1989. After correspondence the case was published in BZN **48**: 312–315 (December 1991). Notice of the case was sent to appropriate journals. An application which included the conservation of the names *Cheilosia* Meigen and *Pyrophaena* Schiner was received from Dr Tadeusz Zatwarnicki (*Wroclaw, Poland*) shortly after that by Dr Barkalov and Prof Kerzhner (see BZN **48**: 312, footnote).

It was noted on the voting paper that the published application had the support of Drs Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*) and F.C. Thompson (*USDA, c/o U.S. National Museum, Washington, D.C., U.S.A.*).

It was also noted that the references mentioned in para. 2 of the application for the usage of the name *Cheilosia* also applied to the usage of *Pyrophaena* (cf. para. 4).

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **48**: 314. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — none.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Cheilosia Meigen, 1822, *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 3, p. 296.

Cheilosia Panzer, [1809], *Faunae insectorum germanicae initia oder Deutschlands Insecten*, Heft 108, p. 14.

Chilosia Agassiz, 1846, *Nomenclatoris Zoologici Index Universalis*, p. 80.

flavipes, *Syrphus*, Panzer, 1798, *Faunae insectorum germanicae initia oder Deutschlands Insecten*, Heft 54, p. 10.

Pyrophaena Schiner, 1860, *Wiener Entomologische Monatschrift*, **4**: 213.

rosarum, *Syrphus*, Fabricius, 1787, *Mantissa insectorum sistens eorum species* ..., vol. 2, p. 341.

The following is the reference for the designation of *Syrphus flavipes* Panzer, 1798 as the type species of the nominal genus *Cheilosia* Meigen, 1822:

Coquillett, D.W. 1910. *Proceedings of the United States National Museum*, **37**: 521.

OPINION 1745

Copromyza limosa Fallén, 1820 (currently *Leptocera* (*Rachispoda*) *limosa*; Insecta, Diptera): lectotype replaced, so conserving the usage of the specific name and also that of *Leptocera* (*Rachispoda*) *lutosa* (Stenhammar, 1855)

Ruling

(1) Under the plenary powers the lectotype designation made by Kim (1972) for *Copromyza limosa* Fallén, 1820 is hereby set aside and in its place the male syntype in Stockholm is designated as the lectotype.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *limosa* Fallén, 1820, as published in the binomen *Copromyza limosa* and as defined by the lectotype designated in (1) above;

(b) *lutosa* Stenhammar, 1855, as published in the binomen *Limosina lutosa* and as defined by the lectotype designated by Kim (1972).

History of Case 2803

An application for the lectotype of the nominal species *Copromyza limosa* Fallén, 1820 to be replaced, so conserving the usage of the specific name and also that of *Leptocera* (*Rachispoda*) *lutosa* (Stenhammar, 1855), was received from Prof Ke Chung Kim (*The Frost Entomological Museum, Pennsylvania State University, Pennsylvania, U.S.A.*) and Dr Jindřich Roháček (*Slezské Zemské Muzeum Opava, Opava, Czech Republic*) on 12 December 1990. After correspondence the case was published in BZN **49**: 127–128 (June 1992). Notice of the case was sent to appropriate journals.

A comment in support from Dr Terry A. Wheeler (*Carleton University, Ottawa, Ontario, Canada*) was published in BZN **49**: 291 (December 1992).

It was noted on the voting paper that the representative list of references held by the Commission Secretariat demonstrating usage of the specific name of *Leptocera limosa* (para. 3 of the application) included the following publications:

Richards, O.W. 1965. Family Sphaeroceridae. *In* Stone, A., Sabrosky, C.W., Wirth, W.W., Foote, R.H. & Coulson, J.R. (Eds.), *A catalog of the Diptera of America north of Mexico*. Agricultural Handbook No. 276. [*L. limosa* on p. 721].

Nartshuk, E.P. 1970. Sphaeroceridae. *In* Bei-Bienko, G.Ya. (Ed.), *Opredelitel nasekomykh evropeiskoi chasti SSSR*, vol. 5, part 2. [p. 341].

Papp, L. 1973. Sphaeroceridae — Drosophilidae. Tragyalegyek. *Fauna Hungariae*, **112**. [p. 70].

Richards, O.W. 1980. Family Sphaeroceridae. *In* Crosskey, R.W. (Ed.), *Catalogue of the Diptera of the Afrotropical region*. [p. 622].

Papp, L. 1984. Sphaeroceridae (Borboridae). *In* Soós, A. & Papp, L. (Eds.), *Catalogue of Palaearctic Diptera*, vol. 10. [p. 92].

Pitkin, B.R. 1988. Lesser dung flies. Diptera: Sphaeroceridae. *Handbook to the identification of British insects*, vol. 10, part 5e. [p. 37].

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 128. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 23: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Dupuis and Lehtinen abstained.

No votes were received from Kabata, Starobogatov and Uéno.

Ride was on leave of absence.

Dupuis abstained because he considered that it was unwise to substitute a male lectotype for a female lectotype.

Original references

The following are the original references to the names on an Official List by the ruling given in the present Opinion:

limosa, *Copromyza*, Fallén, 1820, *Diptera Sueciae Heteromyzides*, p. 8.

lutosa, *Limosina*, Stenhammar, 1855, *Kongl. Vetenskaps-Akademiens Handlingar*, **1853**: 380.

The following is the reference for the designation of the lectotype of *Limosina lutosa* Stenhammar, 1855:

Kim, K.C. 1972. *Entomological News*, **83**: 206.

OPINION 1746

Drosophila putrida Sturtevant, 1916 (Insecta, Diptera): holotype replaced by a neotype

Ruling

(1) Under the plenary powers all previous fixations of type specimens for the nominal species *Drosophila putrida* Sturtevant, 1916 are hereby set aside and the specimen labelled '*Drosophila* (*D.*) *putrida* Sturtevant, 1916, NEOTYPE, Det. D.A. Grimaldi' from 'U.S.A.: New Jersey: Morris County, Pompton Plains, June, 1986, D.A. Grimaldi, coll.' in the American Museum of Natural History, New York, is designated as the neotype.

(2) The name *putrida* Sturtevant, 1916, as published in the binomen *Drosophila putrida* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2804

An application for the holotype of the nominal species *Drosophila putrida* Sturtevant, 1916 to be replaced by a neotype was received from Dr David Grimaldi (*American Museum of Natural History, New York, N.Y., U.S.A.*) on 14 December 1990. After correspondence the case was published in BZN **49**: 129–132 (June 1992). Notice of the case was sent to appropriate journals.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 130. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 23: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Thompson, Trjapitzin, Willink

Negative votes — 2: Dupuis and Lehtinen.

No votes were received from Starobogatov, Štys and Uéno.

Ride was on leave of absence.

Original references

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

putrida, *Drosophila*, Sturtevant, 1916, *Annals of the Entomological Society of America*, **9**: 339.

OPINION 1747

Eristalis Latreille, 1804, *Helophilus* Fabricius, 1805, *Xylota* Meigen, 1822 and *Eumerus* Meigen, 1822 (Insecta; Diptera): conserved

Ruling

(1) Under the plenary powers:

(a) the following generic names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(i) *Elophilus* Meigen, 1803;

(ii) *Eumeros* Meigen, 1803;

(iii) *Heliophilus* Meigen, 1803;

(b) the generic name *Eumerus* Meigen, 1804, and all uses of the name *Eumerus* prior to the publication of *Eumerus* Meigen, 1822, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;

(c) all fixations of type species for the nominal genus *Helophilus* Fabricius, 1805 prior to the designation by Curtis (1832) of *Musca pendula* Linnaeus, 1758 are hereby set aside.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Eristalis* Latreille, 1804 (gender: masculine), type species by subsequent designation by Curtis (1832) *Musca tenax* Linnaeus, 1758;

(b) *Helophilus* Fabricius, 1805 (gender: neuter), type species by subsequent designation by Curtis (1832) *Musca pendula* Linnaeus, 1758, as ruled in (1)(c) above;

(c) *Xylota* Meigen, 1822 (gender: feminine), type species by monotypy of the replaced nominal genus *Heliophilus* Meigen, 1803, *Musca sylvarum* Linnaeus, 1758;

(d) *Eumerus* Meigen, 1822 (gender: masculine), type species by subsequent designation by Curtis (1839) *Syrphus tricolor* Fabricius, 1798.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *tenax* Linnaeus, 1758, as published in the binomen *Musca tenax* (specific name of the type species of *Eristalis* Latreille, 1804);

(b) *pendula* Linnaeus, 1758, as published in the binomen *Musca pendula* (specific name of the type species of *Helophilus* Fabricius, 1805);

(c) *sylvarum* Linnaeus, 1758, as published in the binomen *Musca sylvarum* (specific name of the type species of *Xylota* Meigen, 1822);

(d) *tricolor* Fabricius, 1798, as published in the binomen *Syrphus tricolor* (specific name of the type species of *Eumerus* Meigen, 1822).

(4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Elophilus* Meigen, 1803, as suppressed in (1)(a)(i) above;

(b) *Eumeros* Meigen, 1803, as suppressed in (1)(a)(ii) above;

(c) *Heliophilus* Meigen, 1803, as suppressed in (1)(a)(iii) above;

(d) *Eumerus* Meigen, 1804, as suppressed in (1)(b) above.

History of Case 2749

An application for the conservation of *Eristalis* Latreille, 1804, *Helophilus* Fabricius, 1805, *Xylota* Meigen, 1822 and *Eumerus* Meigen, 1822 was received from Dr Tadeusz Zatwarnicki (*Agricultural University, Wroclaw, Poland*) on 15 November 1989. After correspondence the case was published in BZN **48**: 308–311 (December 1991). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the application had the support of Dr Hans Silfverberg (*Universitetets Zoologiska Museum, Helsingfors, Finland*), and that more than 40 of the additional references held by the Commission Secretariat demonstrating usage of the four generic names (para. 6 of the application) were published in the last 50 years.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **48**: 310. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Trjapitzin, Willink

Negative votes — 2: Holthuis and Thompson.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Holthuis commented that in his view *Helophilus* was not available from Fabricius (1805). The latter had adopted the spelling without explaining the change from *Elophilus* Meigen, 1803 and the change was therefore not a 'demonstrably intentional' emendation (Article 33b(i) of the Code). (*Editorial note*. The name *Helophilus* was cited by Fabricius (1805) in the synonymy of six species of *Eristalis* Latreille, 1804 and in para. 3 of the application it was taken as available from Fabricius under Article 11e). Thompson preferred to adopt *Helophilus* from Meigen (1822).

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Elophilus Meigen, 1803, *Magazin für Insektenkunde (Illiger)*, **2**: 274.

Eristalis Latreille, 1804, *in: Nouveau Dictionnaire d'histoire naturelle ...*, Ed. 1, vol. 24, p. 194.

Eumeros Meigen, 1803, *Magazin für Insektenkunde (Illiger)*, **2**: 273.

Eumerus Meigen, 1804, *Klassifikazion und Beschreibung der europäischen zweiflügeligen Insekten (Diptera Linn.)*, vol. 1, part 1, p. xx.

Eumerus Meigen, 1822, *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 3, p. 202.

Heliophilus Meigen, 1803, *Magazin für Insektenkunde (Illiger)*, **2**: 273.

Helophilus Fabricius, 1805, *Systema Antliatorum ...*, p. 233.

pendula, Musca, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 591.

sylvarum, Musca, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 592.

tenax, Musca, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 591.

tricolor, Syrphus, Fabricius, 1798, *Supplementum entomologiae systematicae*, p. 563.

Xylota Meigen, 1822, *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 3, p. 211.

The following is the reference for the designation of *Musca pendula* Linnaeus, 1758 as the type species of the nominal genus *Helophilus* Fabricius, 1805, and for the designation of *Musca*

tenax Linnaeus, 1758 as the type species of the nominal genus *Eristalis* Latreille, 1804:
Curtis, J. 1832. *British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland* ..., vol. 9, pl. 429 (text), pl. 432 (text) (respectively).

The following is the reference for the designation of *Syrphus tricolor* Fabricius, 1798 as the type species of the nominal genus *Eumerus* Meigen, 1822:
Curtis, J. 1839. *British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland* ..., vol. 16, pl. 749 (text).

OPINION 1748

EPHYDRIDAE Zetterstedt, 1837 (Insecta, Diptera): given precedence over GYMNOMYZIDAE Latreille, 1829

Ruling

(1) Under the plenary powers family-group names based on *Ephydra* Fallén, 1810 are hereby given precedence over those based on *Gymnomyza* Fallén, 1810 (a junior subjective synonym of *Mosillus* Latreille, 1804).

(2) The name *Mosillus* Latreille, 1804 (gender: masculine), type species by subsequent monotypy *Mosillus arcuatus* Latreille, 1805 (a junior subjective synonym of *Syrphus subsultans* Fabricius, 1794, type species of *Gymnomyza* Fallén, 1810), is hereby placed on the Official list of Generic Names in Zoology.

(3) The name *subsultans* Fabricius, 1794, as published in the binomen *Syrphus subsultans* (a senior subjective synonym of *Mosillus arcuatus* Latreille, 1805, the type species of *Mosillus* Latreille, 1804, and the specific name of the type species of *Gymnomyza* Fallén, 1810), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name GYMNOMYZIDAE Latreille, 1829 (type genus *Gymnomyza* Fallén, 1810, a junior subjective synonym of *Mosillus* Latreille, 1804) is hereby placed on the Official List of Family-Group Names in Zoology with the endorsement that it and other family-group names based on *Gymnomyza* are not to be given priority over EPHYDRIDAE Zetterstedt, 1837 and other family-group names based on *Ephydra* Fallén, 1810 whenever *Ephydra* and *Mosillus* or *Gymnomyza* are placed in the same family-group taxon.

(5) To the entry for EPHYDRIDAE Zetterstedt, 1837 on the Official List of Family-Group Names in Zoology is hereby added the endorsement that it is to be given precedence over GYMNOMYZIDAE Latreille, 1829 (type genus *Gymnomyza* Fallén, 1810, a junior subjective synonym of *Mosillus* Latreille, 1804) whenever *Ephydra* and *Mosillus* or *Gymnomyza* are placed in the same family-group taxon.

History of Case 2706

An application for the conservation of the family-group name EPHYDRIDAE Zetterstedt, 1837 by giving it precedence over GYMNOMYZIDAE Latreille, 1829 was received from Drs Wayne N. Mathis (*Smithsonian Institution, Washington, D.C., U.S.A.*) and Tadeusz Zatwarnicki (*Agricultural University, Wroclaw, Poland*) on 15 November 1988. After correspondence the case was published in BZN **49**: 133–136 (June 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that it had been suggested to the authors of the application that, since GYMNOMYZINAE Latreille, 1829 was in effect a 'new' introduction and was based on an unknown junior synonym (*Gymnomyza* Fallén, 1810), an alternative course would have been to conserve usage of the family-group names PSILOPINAE Cresson, 1925 and GYMNOPINI Cresson, 1922. However, the authors preferred to adopt GYMNOMYZINAE and GYMNOMYZINI.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the

proposals published in BZN **49**: 134–135. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 18: Bayer, Bock, Cocks, Cogger, Corliss, Hahn, Holthuis, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Thompson, Trjapitzin, Willink

Negative votes — 7: Bouchet, Halvorsen, Heppell, Kabata, Savage, Schuster and Štys.

Dupuis abstained.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Martins de Souza and Savage commented that the names PSILOPINAE Cresson, 1925 and GYMNOPINI Cresson, 1922 should be conserved, rather than introducing usage of GYMNOMYZINAE and GYMNOMYZINI. Martins de Souza said that family-group names based on *Gymnomyza* Fallén, 1810 were undesirable. This generic name had not been used for almost 150 years and it was a junior subjective synonym of *Mosillus* Latreille, 1804; GYMNOMYZINAE and GYMNOMYZINI had been used (by the authors of the application) only in 1990. Dupuis commented that, although he preferred to give precedence to EPHYDRIDAE, the taxonomic situation was still uncertain and he therefore abstained.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

EPHYDRIDAE Zetterstedt, 1837, *Isis* (von Oken), **1837**: col. 48.

GYMNOMYZIDAE Latreille, 1829, *in* Cuvier, G.C.L.F.D., *Le règne animal distribué d'après son organisation* ..., Ed. 2, vol. 5, p. 535.

Mosillus Latreille, 1804, *in*: *Nouveau dictionnaire d'histoire naturelle*, vol. 24, p. 196.

subsultans, *Syrphus*, Fabricius, 1794, *Entomologia systematica emendata et aucta* ..., vol. 4, p. 304.

The following is the reference for the fixation of *Mosillus arcuatus* Latreille, 1805 (a junior subjective synonym of *Syrphus subsultans* Fabricius, 1794) as the type species of the nominal genus *Mosillus* Latreille, 1804:

Latreille, P.A. 1805. *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 14, p. 390.

OPINION 1749

Epicrium Wagler, 1828 and ICHTHYOPHIIDAE Taylor, 1968 (Amphibia, Gymnophiona): conserved, and EPICRIIDAE Berlese, 1885 (Arachnida, Acari): conserved by the emendation of EPICRIIDAE Fitzinger, 1843 (Amphibia, Gymnophiona) to EPICRIUMIDAE

Ruling

(1) Under the plenary powers:

(a) the suppression in Opinion 1604 of the generic name *Epicrium* Wagler, 1828 is hereby revoked;

(b) it is hereby ruled that for the purposes of Article 29 the stem of the generic name *Epicrium* Wagler, 1828 is EPICRIUM-;

(c) it is hereby ruled that ICHTHYOPHIIDAE Taylor, 1968 and other family-group names based on *Ichthyophis* Fitzinger, 1826 are to be given precedence over EPICRIUMIDAE Fitzinger, 1843 and other family-group names based on *Epicrium* Wagler, 1828 whenever their type genera are placed in the same family-group taxon.

(2) *Caecilia hypocyana* Boie, 1827 is hereby designated as the type species of *Epicrium* Wagler, 1828.

(3) It is hereby confirmed that the original spelling of the family-group name ICHTHYOPHIIDAE Taylor, 1968 is correct.

(4) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Epicrium* Wagler, 1828 (gender: neuter), type species by designation in (2) above *Caecilia hypocyana* Boie, 1827 (with the deletion of *Epicrium* from the Official Index of Rejected and Invalid Generic Names in Zoology);

(b) *Epicrius* Canestrini & Fanzago, 1877 (gender: masculine), type species by monotypy *Epicrius geometricus* Canestrini & Fanzago, 1877.

(5) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *hypocyana* Boie, 1827, as published in the binomen *Caecilia hypocyana* (specific name of the type species of *Epicrium* Wagler, 1828);

(b) *geometricus* Canestrini & Fanzago, 1877, as published in the binomen *Epicrius geometricus* (specific name of the type species of *Epicrius* Canestrini & Fanzago, 1877).

(6) To the entry for ICHTHYOPHIIDAE Taylor, 1968 on the Official List of Family-Group Names in Zoology (spelling confirmed in (3) above) is hereby added the endorsement that it and other family-group names based on *Ichthyophis* Fitzinger, 1826 are to be given precedence over EPICRIUMIDAE Fitzinger, 1843, type genus *Epicrium* Wagler, 1828, and other family-group names based on *Epicrium* whenever their type genera are placed in the same family-group taxon.

(7) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) EPICRIUMIDAE Fitzinger, 1843, type genus *Epicrium* Wagler, 1828 (spelling emended in (1)(b) above), with the endorsement that it and other family-group names based on *Epicrium* are not to be given priority over

ICHTHYOPHIIDAE Taylor, 1968 and other family-group names based on *Ichthyophis* Fitzinger, 1826 whenever their type genera are placed in the same family-group taxon;

(b) EPICRIIDAE Berlese, 1885 (type genus *Epicrius* Canestrini & Fanzago, 1877).

(8) The entry for EPICRIIDAE Fitzinger, 1843 on the Official Index of Family-Group Names in Zoology is hereby emended to record the emendation of its spelling to EPICRIUMIDAE in (1)(b) above.

History of Case 2616

The case was submitted in its original form by Drs Mark Wilkinson and Ronald A. Nussbaum (*Museum of Zoology, University of Michigan, Ann Arbor, Michigan, U.S.A.*) and published in BZN **45**: 207–209 (September 1988). This led to Opinion 1604 (June 1990; BZN **47**: 166–167). The subsequent history of the case was summarized in BZN **48**: 154–155 (June 1991) and **49**: 153–154 (June 1992).

As noted in BZN **49**: 153, in Opinion 1604 the caecilian generic name *Epicrium* Wagler, 1828, which was mistakenly believed to be a replacement for *Ichthyophis* Fitzinger, 1826, was suppressed and placed on the Official Index. This was in order to dispose of the senior but unused family-group name EPICRIIDAE Fitzinger, 1843 and so conserve the established name ICHTHYOPHIIDAE Taylor, 1968. However, Prof A. Dubois (*Muséum National d'Histoire Naturelle, Paris*) subsequently pointed out (BZN **48**: 152–154) that *Epicrium* was an available nominal genus, with its own type species, which might be required for future use. It was therefore proposed (BZN **48**: 155) that the suppression of *Epicrium* should be revoked, and also that ICHTHYOPHIIDAE should be given precedence over EPICRIIDAE Fitzinger. This latter action was in accord with the intentions of the original authors and was supported by Prof H.M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*) in BZN **46**: 134 and **48**: 335–336, although not originally by Dubois (BZN **48**: 152–154).

The name EPICRIIDAE Fitzinger, 1843 is a senior homonym of EPICRIIDAE Berlese, 1855, based on *Epicrius* Canestrini & Fanzago, 1877 and in use for a family of mites (see BZN **47**: 166 and **49**: 153, para. 2). Fitzinger's name was unlikely to be used at family level (see comment by Smith, BZN **48**: 335) and therefore it was proposed (BZN **49**: 154) that this name should be emended to EPICRIUMIDAE, so removing the homonymy. On BZN **49**: 153 it was reported (para. 1) that because of the homonymy Prof Dubois concluded that EPICRIIDAE Fitzinger should be rejected (the last sentence of that paragraph should be emended to read 'Prof Dubois has since suggested that EPICRIIDAE Fitzinger should be rejected because it has a junior homonyn in use').

The Executive Secretary of the Commission reported on BZN **49**: 153 (para. 3) that *Epicrium* was based on a single biological species with two available specific names: *hypocyana* Boie, 1827 and *hasseltii* Wagler, 1828. To settle the question of the nominal type species it was proposed that the Commission designate *Caecilia hypocyana* Boie, 1827. It was also proposed (para. 4) that ICHTHYOPHIIDAE be confirmed as the correct original spelling.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **48**: 155 (June 1991) and supplemented on **49**: 154 (June 1992). At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Bouchet (part), Cocks, Cogger, Corliss, Dupuis (part), Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen (part), Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — 1: Savage.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Bouchet commented: 'I see no reason why the Principle of Priority should not apply to ICHTHYOPHIIDAE Taylor, 1968 and EPICRIIDAE Fitzinger, 1843. None can seriously claim that synonymization of a name introduced as recently as 1968 can destabilize nomenclature'. He also objected to the 'barbaric' spelling EPICRIUMIDAE, as did Dupuis. Lehtinen commented that still unpublished revisional work had shown that *Gamasus mollis* Kramer, 1876 was not a synonym of *E. geometricus* Canestrini & Fanzago, 1877; Kramer's name could therefore not be treated as a senior subjective synonym of the type species of *Epicrius* (cf. BZN **49**: 153, 154). Savage considered that there was no reason to 'create' the family-group name EPICRIUMIDAE.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

EPICRIIDAE Berlese, 1885, *Bollettino della Società Entomologica Italiana*, **17**: 129.

Epicrium Wagler, 1828, *Isis* (von Oken), **21**(7): col. 742.

Epicrius Canestrini & Fanzago, 1877, *Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti*, (5)**4**(1): 131.

EPICRIUMIDAE Fitzinger, 1843, *Systema reptilium*. Fasciculus primus (Amblyglossae), p. 34.

geometricus, Epicrius, Canestrini & Fanzago, 1877, *Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti,* (5)**4**(1): 131.

hypocyana, Caecilia, Boie, 1827, *Isis* (von Oken), **20**: col. 565.

ICHTHYOPHIIDAE Taylor, 1968, *The caecilians of the world: a taxonomic review*, p. 46.

INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat applications on this basis. Applicants are advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described ...'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. Where possible, ten or more relatively recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages and plates, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, The International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, preferably in ASCII text. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(a) *Invitation to comment*. The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles*. At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group specialists.

(c) *Receipt of new applications*. The following new applications have been received since going to press for volume 50, part 3 (published on 30 September 1993). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

(1) *Stictostroma* Parks, 1936 (Porifera, Stromatoporoidea): proposed conservation, and designation of *S. gorriense* Stearn, 1994 as the type species. (Case 2901). C.W. Stearn.

(2) *Acanthoteuthis* Wagner, 1839 and *Kelaeno* Münster, 1842 (Mollusca, Cephalopoda): proposed conservation of usage. (Case 2902). D.T. Donovan.

(3) *Tropidoptera* Ancey, 1889 (Mollusca, Gastropoda): proposed confirmation of *Helix alata* Pfeiffer, 1856 as the type species. (Case 2903). N.L. Evenhuis & R.H. Cowie.

(4) *Nesopupa* Pilsbry, 1900 (Mollusca, Gastropoda): proposed conservation. (Case 2904). R.H. Cowie, C.C. Christensen & N.L. Evenhuis.

(d) *Ruling of the Commission*. Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

Fourth Edition of the International Code of Zoological Nomenclature

The Commission proposes to publish a new edition of the Code taking into account the large number of possible amendments submitted, many of them in response to a widely circulated invitation published in the *Bulletin* (BZN **46**: 5). It is planned that the Fourth Edition will be published during 1995 and that on 1 January 1996 its provisions will supersede those in the current (1985) edition.

The Commission's Editorial Committee met in Hamburg from 12 16 October to prepare a discussion draft for the new edition of the Code. This draft will be available for distribution in February 1994. Copies will be sent without charge to all subscribers to the *Bulletin* and to members of the American and European Associations for Zoological Nomenclature. Any other institution or individual may order a copy from the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD. The cost of printing and postage is about £3 or US$5. Bank charges on currency exchange make it uneconomic to charge the cost of printing and postage (£3 or US$5) except for payment in sterling or US dollars. The draft of the Code will therefore be sent free of charge, but those able to pay in sterling or US dollars are asked to enclose a cheque for £3 or US$5 to cover the cost.

Before completing the definitive text of the Fourth Edition, the Commission will (in accordance with Article 16 of its Constitution) carefully consider all comments and suggestions on the draft submitted within one year from February 1994.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature has been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

The Association's President is Dr V. Mahnert (Switzerland), the Vice-President Dr I.M. Kerzhner (Russia), the Secretary Dr E. Macpherson (Spain) and the Treasurer Dr M.A. Alonso-Zarazaga (Spain). Other members of the Inaugural Council are Dr H.M. André (Belgium), Dr J.-P. Hugot (France), Prof. A. Minelli (Italy) and Dr C. Nielsen (Denmark). Membership of the Association is open to all European zoologists; further details can be obtained from Dr M.A. Alonso-Zarazaga, Museo Nacional de Ciencias Naturales, José Gutiérrez Abascal 2, 28006 Madrid, Spain.

Call for nominations for new members of the International Commission on Zoological Nomenclature

The following members of the Commission reach the end of their terms of service at the close of the XXV General Assembly of the International Union of Biological Sciences to be held in Paris in September 1994: Dr F.M. Bayer (U.S.A., Corallia); Prof J.O. Corliss (U.S.A., Protista); Prof Dr G. Hahn (Germany, Trilobita); Prof Dr O. Halvorsen (Norway, Parasitology); Dr Ya.I. Starobogatov (Russia, Mollusca); Dr V.A. Trjapitzin (Russia, Hymenoptera).

The addresses and specialist fields of the present members of the Commission may be found in the *Bulletin of Zoological Nomenclature*, **50**(1) (March 1993). Under Article 3b of the Commission's Constitution a member whose term of service has ended is not eligible for immediate re-election unless the Council of the Commission has decided to the contrary.

The Commission invites nominations, by any person or institution, of candidates for membership. Article 2b of the Constitution prescribes that:

> 'The members of the Commission shall be eminent scientists, irrespective of nationality, with a distinguished record in any branch of zoology who are known to have an interest in zoological nomenclature'.

(It should be noted that 'zoology' here includes the applied biological sciences (medicine, agriculture, etc.) which use zoological names).

Nominations made since June 1990 will be reconsidered automatically and need not be repeated. Additional nominations, giving the date of birth, nationality and qualifications (by the criteria mentioned above) of each candidate should be sent by 1 June 1994 to: *The Executive Secretary, International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.*

Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895; there are about 9,900 entries.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. *or* A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £60 or $110, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £40 or $75; payment should accompany orders.

In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updatings to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

International Trust for Zoological Nomenclature

Financial Report for 1992

The Trust's high deficit of £8,112 in 1991 was reduced to the more acceptable deficit of £4,328 in 1992. This was achieved mainly by staff economies that were made from April 1992, the aim being to break even financially in a full year. The result is that, with a reduced staff of three in the Secretariat, the work of the Commission, and especially the production of the *Bulletin of Zoological Nomenclature*, is hardly viable.

Nearly half the Trust's income came from the sales of publications, mainly from the *Bulletin of Zoological Nomenclature* which yielded an income of £25,774. Sales of the *Official Lists and Indexes* and the *International Code of Zoological Nomenclature* brought the total income from publications to £28,488. Income from grants remained at £9,000 but the amounts received from donations (£10,512) and investment interest (£10,077) were both less than in 1991. The total income for the year was £58,170, a decrease of £5,382 from 1991.

The main expenditure of the Trust in 1992 was £50,905 for the salaries and National Insurance of the Secretariat of the International Commission on Zoological Nomenclature. Printing of the *Bulletin of Zoological Nomenclature* and distribution of all publications amounted to £8,903. Other costs for office expenses (£1,685), depreciation of office equipment (£305) and audit fee (£700) brought the total expenditure to £62,498, a decrease of £9,166 from 1991.

The Commission's Secretariat was again housed in the Natural History Museum, London, whom we thank for their continuing support. The Trust wishes to express its thanks to all the donors listed below who contributed to its work during the year. Continuing support of this kind is vital if the Commission is to carry out its work for the international zoological and palaeontological community.

M.K. HOWARTH
Secretary and Managing Director
14 June 1993

List of donations and grants received during the year 1992

Agricultural and Food Research Council, U.K.	£2,000
American Association for Zoological Nomenclature	£4,156
W. Ansell	£5
British Ecological Society	£1,000
Freshwater Biological Association, U.K.	£5
German Zoological Society	£163
Lynx Promocions, Spain	£50
Medical Research Council, U.K.	£2,000
Natural Environment Research Council, U.K.	£2,000
Palaeontological Association, U.K.	£250
Royal Danish Academy of Sciences and Letters	£82
Royal Entomological Society of London	£300
Royal Society of London	£1,000
Science and Engineering Research Council, U.K.	£2,000

Spanish Council for Scientific Research	£1,500
Swiss National Science Foundation	£2,000
Academia Sinica, Taiwan	£114
Unione Zoologica Italiana	£217
Zoological Societies of Japan	£670
Total	£19,512

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 1992

Income		
SALE OF PUBLICATIONS		
Bulletin of Zoological Nomenclature	£ 25,774	
International Code of Zoological Nomenclature	1,825	
Official Lists and Indexes	889	
		28,488
GRANTS, DONATIONS AND COVENANTS		19,605
BANK AND INVESTMENT INTEREST		10,077
		58,170
Expenditure		
SALARIES AND NATIONAL INSURANCE	50,905	
OFFICE EXPENSES	1,685	
AUDIT FEE	700	
PRINTING AND DISTRIBUTION OF PUBLICATIONS	8,903	
DEPRECIATION OF OFFICE EQUIPMENT	305	
		62,498
Deficit for the year		4,328

Case 2874

Chtenopteryx Appellöf, 1890 (Mollusca, Cephalopoda): proposed confirmation as the correct original spelling

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Abstract. The purpose of this application is to confirm as correct the original spelling of the name *Chtenopteryx* Appellöf, 1890 for a genus of comb-fin squids. The unjustified emendation to *Ctenopteryx* was made in 1900, and this spelling has been universally used until very recently although with citation of Appellöf as author. However, it is a junior homonym of the coleopteran subgeneric name *Ctenopteryx* Flach, 1889. The most appropriate course of action is to confirm Appellöf's original spelling and to adopt the corrected spelling CHTENOPTERYGIDAE Grimpe, 1922 for the derived family-group name.

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1. Appellöf (1890, p. 3) established the generic name *Chtenopteryx* for a single new species of squid, *Chtenopteryx fimbriatus* [recte: *fimbriata*] (p. 4, figs. 1–6), from Messina (Mediterranean). In a footnote he gave the derivation of the generic name from the Greek words for 'comb' and 'wing'.

2. The name *Chtenopteryx* in its original spelling was used in the following decade only by Joubin (1894, p. 64) in describing a new species *Chtenopteryx cyprinoides* and referring to Appellöf's species *Chtenopteryx fimbriatus*. In a paper published on 15 February 1900, Joubin (pp. 9, 10, 13, 47, 49, 121, 129, pl. 14 and its caption) used the spelling *Ctenopteryx*, attributing it to Appellöf. He (p. 47) used this incorrect spelling in quoting from his own 1894 work and (p. 129) in quoting the title of Appellöf's original paper; he did not mention Appellöf's original spelling *Chtenopteryx*. Pfeffer (28 December 1900, p. 171) decided that Appellöf's name *Chtenopteryx* was a spelling mistake and made the unjustified emendation to *Ctenopteryx*. He wrote (p. 172): 'Appellöf schreibt '*Chth*[sic]*enopteryx*'; dies ist jedoch lediglich ein Schreibfehler; es muss heissen '*Ctenopteryx*' wegen der Kamm-artigen Ausbildung der Querbrücken auf den Flossen'. It is known that Joubin was in correspondence with Pfeffer and it is likely that he learned of Pfeffer's views on the spelling of the generic name prior to Pfeffer's publication. The Greek prefix for 'comb', although beginning with the letter chi, is almost always transliterated as *cteno-*.

3. Grimpe (1922, p. 45) established the subfamily name CTENOPTERYGINAE, with *Ctenopteryx* Appellöf as type genus; this taxon has been used at family rank as CTENOPTERYGIDAE (e.g. Roper, Young & Voss, 1969, p. 8).

4. Until very recently all 20th century authors have used the spelling *Ctenopteryx*, invariably citing Appellöf as the author; a representative list of 50 references between 1900 and 1992 is held by the Commission Secretariat. Sabelli, Giannuzzi-Savelli &

Bedulli (1990, p. 106) revived the original spelling *Chtenopteryx*, with Appellöf as author, within the family CHTENOPTERYGIDAE Grimpe (spelling corrected under Article 35d of the Code), and with *Chtenopteryx fimbriatus* Appellöf, 1890 (a junior subjective synonym of *Sepioteuthis sicula* Verany, 1851, p. 75) as type species. Guerra (1992, p. 315) pointed out the homonymy between *Ctenopteryx* Pfeffer, 1900 and *Ctenopteryx* Flach, 1889 (see para. 5 below) and the consequential need to use Appellöf's original spelling *Chtenopteryx*. Our application to the Commission was in the final stages of preparation when Guerra's 1992 work was published.

5. Prior to Appellöf's 1890 proposal of the name *Chtenopteryx*, Flach (1889, p. 517) had established the name *Ctenopteryx* as a subgenus of the coleopteran genus *Trichopteryx* Kirby, 1826. *Ctenopteryx* Flach is therefore a senior homonym of *Ctenopteryx* as used by Joubin and Pfeffer in 1900.

6. Under Article 33b(i) Joubin's use of the spelling *Ctenopteryx* was not an emendation since the original spelling *Chtenopteryx* was not given; it is, therefore, merely an incorrect subsequent spelling. Pfeffer's (1900) change of Appellöf's name to *Ctenopteryx* was deliberate and is, therefore, available as an unjustified emendation (Article 33b(ii)). We consider, nevertheless, that it would be confusing to attribute the cephalopod genus to Pfeffer (or to Joubin), quite apart from its junior homonymy with Flach's (1889) coleopteran name.

7. The name *Ctenopteryx* Flach is widely used in coleopteran literature, sometimes as a subgenus of *Acrotrichis* (e.g. Johnson, 1985, pp. 224–227) and sometimes as a genus (e.g. Biström & Silfverberg, 1979, p. 13). In view of this it would be inappropriate to ask the Commission to suppress the coleopteran name *Ctenopteryx* in order to conserve that spelling of the cephalopod name despite its wide usage. We consider it desirable that the Commission should confirm the original spelling of the cephalopod name so that it can rapidly be reintroduced into usage.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to confirm that the name *Chtenopteryx* Appellöf, 1890 is correctly so spelled;

(2) to place on the Official List of Generic Names in Zoology the name *Chtenopteryx* Appellöf, 1890 (gender: feminine), type species by original designation *Chtenopteryx fimbriatus* Appellöf, 1890 (a junior subjective synonym of *Sepioteuthis sicula* Verany, 1851);

(3) to place on the Official List of Specific Names in Zoology the name *sicula* Verany, 1851, as published in the binomen *Sepioteuthis sicula* (a senior subjective synonym of *Chtenopteryx fimbriatus* Appellöf, 1890, the type species of *Chtenopteryx* Appellöf, 1890);

(4) to place on the Official List of Family-Group Names in Zoology the name CHTENOPTERYGIDAE Grimpe, 1922 (type genus *Chtenopteryx* Appellöf, 1890), corrected name for a family-group name based upon an unjustified emendation of the name of the type genus);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the names:

(a) *Ctenopteryx* Joubin, 1900 (incorrect subsequent spelling of *Chtenopteryx* Appellöf, 1890);

(b) *Ctenopteryx* Pfeffer, 1900 (unjustified emendation of *Chtenopteryx* Appellöf, 1890 and junior homonym of *Ctenopteryx* Flach, 1889);

(6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name CTENOPTERYGIDAE Grimpe, 1922 (incorrect original spelling of CHTENOPTERYGIDAE Grimpe, 1922).

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Case 836

Clavella Oken, 1815 and *Pennella* Oken, 1815 (Crustacea, Copepoda): proposed conservation

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Abstract. The purpose of this application is to conserve the names of two parasitic copepods, *Clavella* and *Pennella* (both of Oken, 1815), which were published in vol. 3 (Zoologie) of Oken's *Lehrbuch der Naturgeschichte*. Both names are in current use but are formally unavailable because Oken's work has been rejected on the grounds that it did not use binominal names for species (Opinion 417, September 1956). Species of *Clavella* (family LERNAEOPODIDAE Olsson, 1869) parasitize teleost fish of four orders and are widespread in both the Atlantic and Pacific; the type species *C. aduncа* (Strom, 1762) is known as a parasite particularly of cod (*Gadus morhua* Linnaeus, 1758) and other *Gadus* species in the North Sea, but is also found in other fish with a wide distribution. Species of *Pennella* (family PENNELLIDAE Burmeister, 1835) are parasitic on pteropods and cephalopod molluscs, teleost fish and cetaceans.

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1. The question of the status of the names first published in vol. 3 (Zoologie), 1815–1816, of Oken's *Lehrbuch der Naturgeschichte* was raised by Allen (1902) in relation to mammals. In 1944 this problem became the subject of an application to the Commission for a ruling by Dr W.H. Osgood (*Chicago Natural History Museum*) although the application was not published until 1954 (*BZN* **9**: 202–203), after Osgood's death. A report (BZN **9**: 193 201) prepared by Mr F. Hemming (then Secretary to the Commission), which included comments from zoologists concerning mainly mammal names, concluded that Oken's work was non-binominal and therefore that new names published in it were not available. The work was rejected for nomenclatural purposes and placed on the Official Index (Opinion 417, September 1956).

2. Included in Opinion 417 was an invitation to zoologists to submit applications to conserve names first published in the Oken volume, the rejection of which would lead to instability or confusion. Three names have since been conserved from the work: *Stentor* Oken, 1815 (Protista, Ciliophora) in Opinion 418 (September 1956), and *Pan* and *Panthera* (both Oken, 1816 and both Mammalia) in Opinion 1368 (December 1985).

3. Following his (1954) report on the status of Oken's (1815–1816) work (para. 1 above), Hemming sought advice from a number of specialists working on parasitic copepods as to whether, in the interests of stability, it would be desirable for Commission action to conserve from the work names used in this group. The specialists replied (in litt., 1954, 1955) as follows. Dr C. Delamere Debouteville (*Université de Paris, Laboratoire Arago, Banyuls-sur-Mer, France*) wrote: '*Clavella*

et *Pennella* doivent être conservés dans la nomenclature des Copépodes parasites; ils sont universellement connus, trés employés dans la littérature. Ils ne sont pas des genres systématiques indifférents, mais de véritables chefs de file, ayant valeur non seulement d'exemples du points de vue biologique, mais de centres de cristallisations du point de vue taxonomique (*Clavellopsis*, *Clavellina* etc.). Leur disparition serait nettement préjudiciable à la science'. Dr R.Ph. Dollfus (*Laboratoire d'Helminthologie coloniale et de Parasitologie comparée, Museum national d'Histoire naturelle, Paris, France*) commented: 'En ce qui concerne *Clavella* et *Pennella*, il n'y a aucune hésitation. Ces deux noms restent parfaitement valables et il n'y a aucune raison de les rejeter'. Dr J.P. Harding (*The Natural History Museum, London, U.K.*) noted: 'I should be in favour of the validation of *Pennella* and *Clavella*. Both these names are well known in the literature of parasitic copepods'. Prof Paul L. Illg (*University of Washington, Seattle, U.S.A.*) noted: 'With regard to the rejection of Oken's *Lehrbuch*, there are two important generic names that should be validated, namely *Clavella* and *Pennella*'. Despite these statements, an application to conserve the names *Clavella* and *Pennella*, both of Oken, 1815 (p. 358), has not been made until now.

4. The nominal genus *Clavella* was based on the single species *Lernaea uncinata* Müller, 1776 (p. 226), which is therefore the type species by monotypy. In his description of *L. uncinata*, Müller referred to the figure given by Strøm (1762, p. 167, pl. 1, figs. 7–8) for *L. aduncа*, and noted the implication that *aduncа* and *uncinata* were the same species. Müller subsequently twice changed his mind on the identity of *uncinata* (see Dollfus, 1953, p. 343). *L. aduncа* and *uncinata* were synonymised by Dollfus (1953, p. 339) who noted that Müller's uncertainty had arisen because the morphology of the taxon was variable, depending on its location within the fish host and the condition of the latter. There are some 29 nominal species currently included in the genus (four of which I described myself).

5. The nominal genus *Pennella* Oken was based on the single species *Pennella diodontis* Oken, 1815 (p. 358). Wilson (1917, p. 113) synonymised *P. diodontis* with *Pennatula sagitta* Linnaeus, 1758 (p. 819), based on a rather perfunctory statement by von Nordmann (1832, p. 122) in his study of the latter: 'Dekay hat, wie es scheint, dasselbe Thier auf einem *Diodon pilosus* gefunden'. Wilson commented that the species other than *sagitta* placed by Linnaeus in *Pennatula* are sea pens (Cnidaria, Anthozoa). Other early authors, among them Ellis, Lamarck and Esper, followed Linnaeus and placed *Pennatula sagitta* among the polyps; Nordmann (1832, pp. 52–53, 121, pl. 10, figs. 6–8) was the first to recognise *Pennatula sagitta* as a parasitic crustacean and placed it in *Pennella*. Wilson (1917, p. 105) mistakenly cited *sagitta* as the type species of both *Pennatula* Linnaeus, 1758 and *Pennella*; the valid type for *Pennatula* is *Pennatula phosphorea* Linnaeus, 1758 (p. 818) by Kükenthal's (1915, p. 81) designation. Most authors subsequent to Wilson have not accepted the synonymy of *sagitta* with *diodontis*; the latter has been recognised as a valid taxon by the most recent reviser (Hogans, 1988), who re-examined and redescribed specimems from *Diodon* (porcupine fishes).

6. The generic name *Pennella* Oken was misspelled as '*Penella*' by Burmeister (1835, p. 320), who made it the type genus of a family-group PENELLINA (p. 318), corrected to PENNELLINAE by Wilson (1917, p. 103). The group is currently considered to be distinct at family level (see Bowman & Abele, 1982, p. 13).

7. Both *Clavella* and *Pennella* have remained in use, attributed to Oken (1815), both before and after the publication of Opinion 417 in 1956. Both names have appeared extensively in the literature, both taxonomic and ecological, in the last 40 years. Recent works in which the names have appeared include Dollfus (1953), Yamaguti (1963), Gaevskaya & Umnova (1977), Kabata (1979), Love & Moser (1983), Pillai (1985), Castro & Baeza (1989), Luque & Farfan (1990) and Grabda (1991). A representative list of a further 15 references demonstrating usage of the names is held by the Commission Secretariat; these involve 13 additional authors and were all published within the last 23 years. On request I could easily provide another 50 citations.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that the following generic names are available despite having been published in a rejected work:
   (a) *Clavella* Oken, 1815;
   (b) *Pennella* Oken, 1815;

(2) to place the following names on the Official List of Generic Names in Zoology:
   (a) *Clavella* Oken, 1815 (gender: feminine), type species by monotypy *Lernaea uncinata* Müller, 1776 (a junior subjective synonym of *Lernaea adunca* Strøm, 1762);
   (b) *Pennella* Oken, 1815 (gender: feminine), type species by monotypy *Pennella diodontis* Oken, 1815;

(3) to place the following names on the Official List of Specific Names in Zoology:
   (a) *adunca* Strøm, 1762, as published in the binomen *Lernaea adunca* (senior subjective synonym of the specific name of *Lernaea uncinata* Müller, 1776, the type species of *Clavella* Oken, 1815);
   (b) *diodontis* Oken, 1815, as published in the binomen *Pennella diodontis* (specific name of the type species of *Pennella* Oken, 1815).

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Case 2842

Naucrates Rafinesque, 1810 and *Xyrichtys* Cuvier, 1814 (Osteichthyes, Perciformes): proposed conservation

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Abstract. The purpose of this application is to conserve the names *Naucrates* Rafinesque, 1810 and *Xyrichtys* Cuvier, 1814 which are both in use. The first refers to the monotypic pilotfish *N. ductor* (Linnaeus, 1758) (family CARANGIDAE), a pelagic species which occurs in all tropical and temperate seas and is common in the Mediterranean. The second relates to the genus of about 20 species of razorfishes (family LABRIDAE) which occur circumglobally in tropical, subtropical and temperate seas, also including the Mediterranean. Both names are threatened by the senior subjective synonym *Hemipteronotus* Lacepède, 1801, for which suppression is proposed. It is also proposed that *Centronotus* Lacepède, 1801, an unused senior objective synonym of *Naucrates*, be suppressed.

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1. Linnaeus (1758, p. 261), following and expanding on Willughby (1686, pp. 213–216), included two species of razorfishes (family LABRIDAE) among the five species (*hippurus*, *equiselis*, *pentadactyla*, *novacula* and *pompilus*) of his genus *Coryphaena* (now family CORYPHAENIDAE, the dolphins; type species *C. hippurus* Linnaeus, 1758 by subsequent designation of Jordan & Gilbert, 1883, p. 454). The two razorfish species were *Coryphaena novacula* of the Atlantic and Mediterranean and *C. pentadactyla*, an Indo-Pacific razorfish, the males of which have five or six dark red spots in a row behind the eye.

2. The nominal species *Coryphaena pentadactyla* Linnaeus, 1758 (p. 261) was itself composite. Linnaeus based his description on three sources: (1) 'Blennius maculis 5 utrinque versus caput nigris', from *Act. Stockh.* (i.e. *Memoirs of Stockholm*), 1740, vol. 1, p. 460, pl. 3, fig. 2; (2) *Valent.* (for Valentijn, 1724), *amb.* (for Amboin), part 5, p. 435, pl. 292; (3) *Will. icht.* (for Willughby, 1686) appendix, p. 7, pl. 8, fig. 2. The first of these refers to the Indo-Pacific razorfish (mentioned in para. 1 above) and the third to the pilotfish, also listed elsewhere in *Systema Naturae* as *Gasterosteus ductor* Linnaeus, 1758 (p. 295; family CARANGIDAE). The inclusion of the reference to Willughby (1686, pl. 8, fig. 2) originated in the latter's use of the Dutch name 'Viif Vinger Visch' for the pilotfish, figured from a drawing by Nieuhof, so that Linnaeus confused this with the Indo-Pacific razorfish with its five or six spots behind the eye. Gmelin ([1789], pp. 1191–1192) corrected the error by omitting the reference to Willughby under

Coryphaena pentadactyla, thereby restricting the name to the razorfish. Bloch (1787, p. 115), Cuvier (1815, p. 329) and Valenciennes (1840, pp. 64–69) commented that Linnaeus had mistakenly included two different taxa under the name, and accepted *pentadactyla* for the razorfish. With the exception of Lacepède (1801) (see para. 3 below), this interpretation of *pentadactyla* has been followed consistently by subsequent authors; the taxon is currently known as *Xyrichtys pentadactyla* (see paras. 7 and 8 below).

3. Lacepède (1801, p. 214) erected *Hemipteronotus* for two new nominal species, *H. gmelini* and *H. quinquemaculatus*. The former, for which Lacepède gave two fin-ray counts (dorsal rays 14 and pelvic rays 8), was regarded by Valenciennes (1840, pp. 35, 65) as unidentifiable; Valenciennes noted that it may have been a holocentrid. *H. quinquemaculatus* was proposed for 'l'hémiptéronote cinq-taches'; *Coryphaena pentadactyla* was included (p. 215), attributed to Gmelin, [1789], among its synonyms. Lacepède cited Linnaeus's synonyms for *C. pentadactyla*, including the Willughby reference to the pilotfish.

4. Lacepède's (1801, p. 214) description of *H. quinquemaculatus* was based on Bonnaterre's (1788, p. 59, pl. 33, fig. 126) reproduction of Nieuhof's drawing of *Gasterosteus ductor* (used previously by Willughby, 1686, appendix, pl. 8, fig. 2; see para. 2 above), and described by Bonnaterre (p. 59) as *Coryphaena pentadactyla*. Lacepède (p. 215 and footnote) derived the name 'hémiptéronote' from the Greek words for 'half', 'fin' and 'back', and wrote that the name was intended to indicate the shortness of the dorsal fin and its similarity to that of the coryphaenids. This is an obvious reference to the short, posteriorly placed dorsal fin of *Gasterosteus ductor*. Cuvier (1815, p. 329) noted that, although Linnaeus had included two taxa under the name *Coryphaena pentadactyla* (see para. 2 above), Lacepède had considered only one of them (the pilotfish) when he founded *Hemipteronotus*. Valenciennes (1840, p. 68), in discussing Lacepède's ill-founded *Hemipteronotus*, wrote: 'J'ai été bien long-temps à concevoir comment, ayant sous les yeux toutes les figures qu'il cite dans sa synonymie, il avait pu attribuer à l'espèce un caractère de tout point opposé à la vérité; et j'ai été obligé de conclure, que de tant de figures il n'en avait qu'une, et précisément la fausse, celle de Nieuhof, copiée par Bonnaterre'. Bleeker (1862, p. 414) designated *H. quinquemaculatus* as the type species of *Hemipteronotus*. Subsequently Jordan (1917, p. 61) cited *quinquemaculatus* as a synonym of *Coryphaena pentadactyla* 'Gmelin'.

5. Lacepède (1801, pp. 309, 311) established the name *Centronotus* for a genus of nine nominal species, including '*Gasterosteus conductor* Linnaeus' ('Le centronote pilote'; he intended *G. ductor* Linnaeus). Willughby's (1686, pl. 8, fig. 2) reference to the pilotfish was included among the synonymies. Rafinesque (1810, p. 43) founded *Naucrates* for two nominal species, including *Centronotus conductor* Lacepède; Jordan & Gilbert (1883, p. 443) designated '*Naucrates conductor* Raf., = *Gasterosteus ductor* Linn.' as the type species. Jordan (1917, p. 62) used the same notation in designating a type for *Centronotus* Lacepède, rendering the latter name a senior objective synonym of *Naucrates*. Until recently, vol. 3 of Lacepède's work *Histoire naturelle des poissons*, in which the name *Centronotus* appeared, was thought to date from 1802. On this basis Jordan (1917, pp. 62, 80) considered the fish name *Centronotus* Bloch & Schneider, 1801 (p. 165; a junior objective synonym of *Pholis*

Scopoli, 1777 (see Eschmeyer, 1990, pp. 89, 312); family PHOLIDAE) to be a senior homonym of *Centronotus* Lacepède and noted that the latter was replaced by *Naucrates*; the name *Naucrates* has consistently been used for the pilotfish. Roux (1973, p. 34) demonstrated that Lacepède's vol. 3 dates from 16 October 1801. To our knowledge, an exact date for Bloch's (1801) work (published posthumously by Schneider) has not been ascertained, and publication must therefore be deemed to be 31 December 1801 (Article 21c(ii) of the Code). It is very desirable that the unused name *Centronotus* Lacepède be suppressed to allow continued usage of *Naucrates*, and this we now propose.

6. Cuvier (1814, p. 87; 1815, p. 324) noted that Linnaeus (1758) had included razorfishes with dolphins in *Coryphaena* (see para. 1 above) and erected the genus *Xyrichtys* Cuvier, 1814 for the razorfishes. Cuvier (1814, p. 87) noted the name as 'XYRICHTE *Xyrichlys*'; this was corrected to *Xyrichtys* in Cuvier (1815, p. 329). The name has been spelt *Xyrichthys* by a number of subsequent authors. Cuvier (1814) included in *Xyrichtys* the species *Coryphaena novacula* and *C. pentadactyla*, both of Linnaeus (1758), and the American parrotfish *C. coerulea* Bloch, 1786 (p. 148, pl. 176), the last of which was mistakenly included by Bloch (1787, p. 120, pl. 186) among the dolphins. Jordan & Gilbert (1883, p. 605) designated *X. novacula* as the type species of *Xyrichtys*. A specimen in the Linnaean fish collection in London has been ascribed to this species (see Wheeler, 1985, p. 65).

7. *Hemipteronotus* Lacepède, 1801 was treated by some authors as the valid name for the razorfishes, based on the restriction by early authors of the name *pentadactyla* to this group (para. 2 above). However, Bauchot & Quignard (1973, p. 442) renewed attention to the identity of the Nieuhof drawing in Willughby (1686) and Bonnaterre (1788) as *Naucrates ductor*. The meaning of *H. quinquemaculatus*, the type species of *Hemipteronotus*, is composite and confused, relating by description to the pilotfish (now *N. ductor*) and by reference both to the latter and to the razorfish (*C. pentadactyla*) (see paras. 3 and 4 above). Bauchot & Quignard (1973) adopted *Xyrichtys* Cuvier, 1814 as the next available name for the razorfish, and this has been followed since. Eschmeyer (1990, p. 179) recorded *Hemipteronotus* as a synonym of *Xyrichtys*. It is also a senior subjective synonym of *Naucrates* Rafinesque, 1810.

8. Both names *Naucrates* Rafinesque and *Xyrichtys* Cuvier are used consistently for the monotypic carangid pilotfish *N. ductor* (Linnaeus) and for the 20 species of labrid razorfishes respectively. Recent works in which the names have appeared include Smith-Vaniz (1984, 1986; *Naucrates*); Gomon (1984) and Quignard & Pras (1986) (*Xyrichtys*); Dor (1984), Smith & Heemstra (1986), Masuda, Amaoka, Araga, Uyeno & Yoshino (1988) and Randall, Allen & Steene (1990) (both names). A representative list of a further five publications since 1980 demonstrating usage of the names is held by the Commission Secretariat. Fernholm & Wheeler (1983, p. 243) believed three specimens in the Linnaean collection in Stockholm to be part of the type series of *N. ductor*.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following generic names:
   (a) *Hemipteronotus* Lacepède, 1801 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(b) *Centronotus* Lacepède, 1801, and all uses of the name *Centronotus* prior to the publication of *Centronotus* Bloch & Schneider, 1801, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the following names:
(a) *Naucrates* Rafinesque, 1810 (gender: masculine), type species by subsequent designation by Jordan & Gilbert (1883) *Gasterosteus ductor* Linnaeus, 1758;
(b) *Xyrichtys* Cuvier, 1814 (gender: masculine), type species by subsequent designation by Jordan & Gilbert (1883) *Coryphaena novacula* Linnaeus, 1758;

(3) to place on the Official List of Specific Names in Zoology the following names:
(a) *ductor* Linnaeus, 1758, as published in the binomen *Gasterosteus ductor* (specific name of the type species of *Naucrates* Rafinesque, 1810);
(b) *novacula* Linnaeus, 1758, as published in the binomen *Coryphaena novacula* (specific name of the type species of *Xyrichtys* Cuvier, 1814);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
(a) *Hemipteronotus* Lacepède, 1801, as suppressed in (1)(a) above;
(b) *Centronotus* Lacepède, 1801, as suppressed in (1)(b) above.

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Case 2876

Cetiosauriscus von Huene, 1927 (Reptilia, Sauropodomorpha): proposed designation of *C. stewarti* Charig, 1980 as the type species

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Abstract. The purpose of this application is to designate *Cetiosauriscus stewarti* Charig, 1980 as the type species of the Jurassic diplodocid sauropod genus *Cetiosauriscus* von Huene, 1927. The specimen on which this genus was founded, and which is now the holotype of *C. stewarti*, was originally identified as *Ornithopsis leedsii* Hulke, 1887 but this has been shown to be an unwarranted identification.

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1. Hulke (1887, p. 695) described the partial skeleton of a sauropod from the Kimmeridge Clay of Northamptonshire, England. He referred it to the genus *Ornithopsis* Seeley, 1870 (type species *O. hulkei* Seeley, 1870), but placed it in a new species *O. leedsii* (p. 695). The holotype consists of several vertebrae, ribs, ilium, pubes and ischia; it is registered in the Natural History Museum, London, as BM(NH) Pal. Dept. no. R.1988.

2. Phillips (1871, p. 291) had established a species *Cetiosaurus oxoniensis* on a single incomplete skeleton from the Bathonian of Oxfordshire. Seeley (1889, p. 395) stated that *Ornithopsis leedsii* and *Cetiosaurus oxoniensis* 'are apparently referable to one genus'. This view was accepted generally, so that *O. leedsii* was attributed to *Cetiosaurus* Owen, 1841 (p. 457).

3. Woodward (1905) described a newly found sauropod skeleton from the Oxford Clay, registered as BM(NH) Pal. Dept. no. R.3078, as another specimen of *Cetiosaurus leedsii*. Whereas most English sauropod discoveries consist of only a few fragments, this one — though lacking any skull material — included an unusually large number of postcranial elements. It was mounted and for many years was exhibited in the Dinosaur Gallery of the Natural History Museum in London.

4. Von Huene (1927, p. 453) claimed that this specimen described by Woodward differed sufficiently from *Cetiosaurus* to warrant its generic separation. He established the genus *Cetiosauriscus* with '*Cetiosaurus leedsii*' (as exemplified by specimen R.3078) as the type species. Von Huene described the characters of specimen R.3078 that were diagnostic of his new genus and contrasted them with *Cetiosaurus*. The type species of *Cetiosaurus*, *C. medius* Owen, 1842 (p. 100), is itself unsatisfactory. Steel (1970, pp. 64–65) pointed out that *C. medius* was 'based upon vertebrae' and that the genus *Cetiosaurus* was 'founded upon very insubstantial criteria and is hence difficult to define'.

5. I (Charig, 1980, p. 242) pointed out that the only element preserved in both the holotype of *Ornithopsis leedsii* (R.1988, para. 1 above) and the specimen referred to that species by Woodward (R.3078, para. 3 above) was the ilium. Seeley (1889, p. 394) had written of R.1988 that 'from the imperfect fragment preserved it is

impossible to judge of the form of the ilium'. I re-examined the fragment in question and confirmed that it was impossible to compare it with the ilium of R.3078. Indeed, since this is the only element common to both specimens the two cannot be compared in any particular and R.3078 cannot be referred to *O. leedsii* or to any other species. There being no specific name for the specimen described by Woodward and used by von Huene to establish *Cetiosauriscus*, I proposed (1980, p. 242) the new name *Cetiosauriscus stewarti* and noted that consideration of this change of nominal type species (but not of taxonomic basis) should be referred to the Commission. This I now do under Article 70b (misidentified type species).

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Cetiosauriscus* von Huene, 1927 and to designate *Cetiosauriscus stewarti* Charig, 1980 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Cetiosauriscus* von Huene, 1927 (gender: masculine), type species by designation in (1) above *Cetiosauriscus stewarti* Charig, 1980;

(3) to place on the Official List of Specific Names in Zoology the name *stewarti* Charig, 1980, as published in the binomen *Cetiosauriscus stewarti* (specific name of the type species of *Cetiosauriscus* von Huene, 1927).

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Comments on the proposed stabilization of usage of the name *Ceratites nodosus* (Mollusca, Ammonoidea)
(Case 2732; see BZN **48**: 31–35, 246; **49**: 145–149, 290; **50**: 54–56, 141–142, 229–231)

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The attribution of the name *Ceratites nodosus* to Schlotheim, as proposed in the application by Urlichs, seems to me to be desirable. The following points should be borne in mind.

1. Original specimens of '*Ammonites nodosa* Bruguière' were not examined by (at least) the majority of authors; that nominal species was based on the rather poor illustration referred to by Bruguière, and not a specimen. When original material was rediscovered it turned out not to belong to *Ceratites nodosus* as long understood.

2. Tozer (BZN **49**: 145–149) underestimates the extent to which *Ceratites nodosus* in the sense (based on a Schlotheim figure) which Urlichs seeks to conserve is established in the literature and in practical field-work, and has been at least since the time of Philippi (1901). Tozer's assertion (his para. 8) that the taxonomy adopted by Urlichs & Mundlos (1987) is 'unarguably subjective' and not current usage is not justified. Their taxonomy is more elaborate than that of Schlotheim, Philippi, Spath and Wenger, but it is based on them and is the actual 'current usage', and that in the very 'homeland' of *Ceratites*. Every taxonomy is subjective to some extent: there is nothing wrong about that. The consequences for stratigraphy and taxonomy of abandoning this usage should be taken very seriously, as pointed out by Urlichs (see also Abb. 16 of Urlichs & Mundlos (1987)). The danger of confusion and misunderstandings is immense.

To sum up: in my opinion 'strict adherence to rules', as proposed by Tozer, would in this case have disadvantages for practical taxonomy and stratigraphy which far outweigh any advantages there might be. I support the application by Urlichs.

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1. I should like to reply to the comments by the late R.V. Melville (BZN **50**: 55–56).

2. Melville was indeed correct in stating (his para. 6) that 'Schlotheim's figure would have been of primary importance' to our (Urlichs & Mundlos, 1987) predecessors, but he was mistaken in saying (para. 2) that Scheuchzer's specimen in Zurich designated by Rieber & Tozer as lectotype agrees with the usage established by Philippi and subsequent workers. It does not so so (BZN **48**: 33, para. 9); if it did I would not have submitted my application. The adoption of this specimen as type would immediately alter the established meaning of *Ceratites nodosus*.

3. The Schlotheim specimen designated as lectotype by Urlichs & Mundlos (1987, p. 7) is not completely decorticated (cf. para. 2 of Melville's comment). Only one whorl side of the body chamber is corroded. On the other side the ribs are visible. The

umbilical width and the cross section are measurable on the phragmocone, and the suture is uncorroded. Therefore, the characters of taxonomic importance are clearly visible. There is no doubt about its identity with what we now call *Ceratites nodosus*.

4. Of course, no information was published about the exact level from which the lectotypes proposed by Rieber & Tozer (1986) and Urlichs & Mundlos (1987) originated (see para. 4 of Melville's comment). However, the species of *Ceratites* are very characteristic, and their stratigraphic range within the Upper Muschelkalk (which reaches a thickness of 70–90m) is well known since Riedel (1916), who subdivided the Upper Muschelkalk into 10 *Ceratites* Zones. This subdivision has often been confirmed and completed by different authors, e.g. Wenger (1957), Hagdorn & Simon (1985) and Urlichs (1993). Specimens comparable to the lectotype of *Ceratites nodosus* proposed by Rieber & Tozer (1986) occur in SW-Germany 20–23m above the base of the Upper Muschelkalk; those specimens comparable to the Schlotheim lectotype proposed by Urlichs & Mundlos (1987) are found at 60–65m. The lower level corresponds to the Upper Anisian and the upper to the Lower Ladinian. The phylogeny of *Ceratites* has been established from the stratigraphic ranges of the different species (Riedel, 1916; Wenger, 1957); it is one of the best known examples.

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Comment on the proposed conservation of *Clavella* Oken, 1815 and *Pennella* Oken, 1815 (Crustacea, Copepoda)

(Case 836; see BZN **50**: 273–276)

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Clavella and *Pennella* are widely used in the taxonomic literature on parasitic copepods (Kabata, 1979, 1992; Hogans, 1988). Both genera have been redefined and modern redescriptions are available of their type species, *Lernaea uncinata* Müller, 1776 (now *Clavella adunca*) (in Kabata, 1979) and *Pennella diodontis* Oken, 1815 (in Hogans, 1988). There is no taxonomic confusion surrounding either genus. These generic names are also mentioned frequently in non-taxonomic, parasitological literature (e.g. Dogiel et al., 1958; Kabata, 1970; Sniesko, 1970; Möller & Anders, 1983). I am in favour of the conservation of both generic names and of the binomen *Pennella diodontis* because of their wide use in taxonomic and general parasitological literature.

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Comment on the proposal to conserve *Oecothea* Haliday in Curtis, 1837 and to designate *Helomyza fenestralis* as the type species (Insecta, Diptera)

(Case 2836; see BZN **50**: 44–47, 235–236)

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I support heartily the application by Woźnica & Zatwarnicki on *Oecothea* Haliday for restoring validity to its over-a-century usage.

Thompson & Mathis (1980), in their thorough and commendable study of the generic names of Haliday in Curtis (1837), erred, in my opinion, in their treatment of included species of *Oecothea*. Their designated type species, while concordant with their view of included species and the problems with these, left the long-used *Oecothea* of authors without a name (later supplied by Peterson & Gill, 1982, but not widely accepted).

The disputed problem is not availability, well elucidated by Thompson & Mathis (1980), but the type species, and the crux of this problem is what species, if any, was or were originally included. Under the plenary powers, of course, any species can be designated as type, whether or not originally included.

My catalogue of family-group names in Diptera, nearing completion, contains a detailed analysis of species numbers and position for *Oecothea*. I do not agree with Thompson & Mathis (1980) that the four species following *Oecothea* in Curtis's Addenda were necessarily originally included. Indeed, we have Haliday's (1838, p. 187) own nearly contemporaneous testimony that they were not. The importance of this paper, entitled *New British insects indicated in Mr. Curtis's Guide*, is that it is the author's explanation of his own names, merely listed in Curtis's work; his note for subgenus *Aecothea* [sic] reads: '*H*[*elomyza*] *fenestralis* is *the only* [italics mine] British species'. In my view, the pragmatic conclusion, considering only the 1837 *Guide*, would have been that *Oecothea* in 1837 was ambiguous and without *clearly* associated species, and that the type was *H. fenestralis* by subsequent monotypy in 1838. But the designation by Thompson & Mathis (1980) has caused recourse to the Commission, which the applicants have now provided.

A minor detail concerns *Aecothea* Haliday, 1838. Thompson & Mathis (1980) considered this to be an unjustified emendation of *Oecothea*. The applicants have suggested that it was 'a deliberate transliteration of Greek', which would still be an unjustified emendation. However, there is, strictly speaking, no evidence of emendation and nomenclaturally *Aecothea* must be considered an erroneous subsequent spelling.

Comments on the proposed conservation of the specific name of *Cliola* (*Hybopsis*) *topeka* Gilbert, 1884 (currently *Notropis topeka*) (Osteichthyes, Cypriniformes)
(Case 2808; see BZN **49**: 268–270; **50**: 144)

(1) Richard L. Mayden
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Carter R. Gilbert
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We wish to oppose the application by Drs Cross & Collins to conserve the specific name of *Notropis topeka* (Gilbert, 1884). Our reasons are presented below.

1. Several years ago we published a paper (Mayden & Gilbert, 1989) resurrecting the species name *tristis* Girard, 1857 for the North American cyprinid fish previously known as *N. topeka* (Gilbert, 1884). We were aware at the time that the option was available by which we could have requested the conservation of the junior synonym.

2. North American ichthyologists appear equally divided on the issue of nomenclatural priority versus conservation of younger names. The name change proposed by us, for example, did not appear in the most recent checklist of common and scientific names of North American fishes (Robins et al., 1991) but was used in the Peterson field guide to North American freshwater fishes (Page & Burr, 1991). It was also used in various chapters of the recently-published comprehensive book on the systematics and ecology of North American freshwater fishes (Mayden (Ed.), 1993), which included a complete checklist of native freshwater fishes.

3. We are not opposed to name changes per se but generally support the conservation of names in cases where this would result in transposition or transferral of long-established names among species.

4. The description of *Moniana tristis* Girard, 1857, although falling well short of today's standards, was good according to the standards at the time.

5. *Notropis tristis* is not considered to be threatened or endangered, is not an important game species, is not used in biomedical research, and is not 'important' in other ways such that the name change would cause confusion among laymen or professional scientists.

6. Changes in species names of North American fishes, based exclusively on nomenclatural priority, have occurred a number of times during the past 65 years (Hubbs & Brown, 1929; Hubbs, 1935; Hubbs, 1936; Hubbs & Bailey, 1940; Hubbs & Raney, 1944; Suttkus, 1985; Böhlke et al., 1989; Mayden & Gilbert, 1989; McCosker et al., 1989). A list (held by the Secretariat), which does not purport to be complete, includes 12 examples. Of these, seven have occurred within the past ten years, of which all but the two proposed by us were accepted by Robins et al. (1991). This list is not restricted to 'obscure' species but includes such important and well-known sport fishes as the bluegill sunfish (formerly *Lepomia incisor*, now *L. macrochirus*) and spotted bass (formerly *Micropterus pseudaplites*, now *M. punctulatus*) (Hubbs, 1935; Hubbs & Bailey, 1940).

7. In some cases the desire to conserve established names has transcended what might be termed 'scientific integrity'. For example, one of us (R.L.M.) was earlier urged (not by the authors of the application), in the interest of conserving the species name *topeka*, to designate as lectotype of *Moniana tristis* a specimen of another species from the mixed syntypic series that obviously was different from the one for which the original description was intended. We are strongly opposed to such practices!

8. A far greater number of nomenclatural changes among North American fishes (mostly involving generic reallocations) have occurred in recent years as a result of continuing systematic research than as a result of strict adherence to the Code. Probably the most notable example involves the change of the name for the rainbow trout from *Salmo gairdneri* to *Oncorhynchus mykiss* (see Smith & Stearley, 1989). This change has caused considerable confusion among laymen and scientists alike, but was an unavoidable consequence of the scientific evidence presented. By contrast, an ongoing study by one of us (C.R.G.), which involves reexamination of original descriptions and extant type material of North American freshwater fishes, has revealed only four other cases of potential name changes based on nomenclatural priority. Complete nomenclatural stability among North American fishes, while desirable, is in many respects an unrealistic goal.

In conclusion, we recommend that the application to conserve the name *Notropis topeka* Gilbert, 1884 be rejected and that the senior synonym *N. tristis* (Girard, 1857) be retained, as earlier proposed by us (Mayden & Gilbert, 1989).

Additional references

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Smith, G.R. & Stearley, R.F. 1989. The classification and scientific names of rainbow and cutthroat trouts. *Fisheries*, **14**(1): 4–10.

Suttkus, R.D. 1985. Identification of the percid, *Ioa vigil*. *Copeia*, **1985**(1): 225–227.

(2) Bernard Kuhajda
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I am opposed to the proposal of Cross & Collins to conserve the name *Notropis topeka* (Gilbert, 1884). Nomenclatural stability is the main reason for their proposal, which I believe should not take precedence over the rules of nomenclature. I understand that these citizens of Kansas (from where the nominal species was first described) would prefer that the name *topeka* remain in the literature, but it should not be at the expense of science.

(3) Frank B. Cross & Joseph T. Collins
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We consider it unnecessary and unwise to replace the name *Notropis topeka* (Gilbert, 1884), which has been used for this species for more than a century (following Jordan, 1885), with a name burdened by the uncertainties that attend Girard's (1857) name *tristis*. We grant that Mayden & Gilbert (1989) provided a useful, insightful interpretation of evidence and historical circumstances which indicate, arguably, that this taxon is the one to which Girard (1857) intended that the name *Moniana tristis* should apply. We believe their case is plausible but inconclusive, for the reasons explained in our application.

The original description of *Moniana tristis* Girard, 1857, alone and in combination with supplementary information in Girard (1858), has not enabled assignment of the name to any known taxon without reference to the type material. Of the two syntypes that have been relocated and examined, one represents the species known as the Topeka shiner but the other does not. Three other syntypic specimens remain undiscovered, judging from Girard's (1858) account, and a more satisfactory assignment of the name *tristis* could be made if their identity were known. There are several species to which Girard's description might apply, especially because the type locality can be established only vaguely and inferentially. The date of capture is similarly problematic. The name *Notropis topeka* is free of all such problems.

Name-changes arising from new evidence of phylogenetic relationships among taxa, as in the recent case affecting the rainbow trout, *Oncorhynchus mykiss*, can be accepted. But the decision at hand is purely nomenclatural and systematic considerations are not involved.

The general abundance and geographic distribution of the Topeka shiner have receded greatly in the past century and its decline now seems to be accelerating. Consequently, its designation as a 'Category One Candidate Species' has been recommended (Tabor, 1993) and is now being processed through provisions of the United States Endangered Species Act (as amended) under the name *Notropis topeka*. 'Category One' species are those which meet Congressional criteria for listing as endangered or threatened.

Additional reference

Tabor, V. 1993. *Status report on the Topeka shiner,* Notropis topeka. United States Fish and Wildlife Service, Manhatten, Kansas, U.S.A. (13 February 1993).

Comments on the proposed conservation of *Dinodontosaurus* Romer, 1943 (Reptilia, Synapsida)
(Case 2807; see BZN **49**: 52–54, 291)

(1) A.R.I. Cruickshank

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The problem with the nominal genus *Diodontosaurus* Caldas, 1936 is that the material on which it was based still exists, is clearly recognizable and a sufficiently good description of the skull is available (Caldas, 1936, pp. 243–249, fig. 1) for it not to be confused with other similar material (contra Cox, 1968, p. 9, footnote).

A simple-minded approach to this problem would clearly be to retain the genus *Diodontosaurus*, type species *pedroanum* (a junior subjective synonym of *Dicynodon turpior* Huene, 1935), based on the skull and partial skeleton (DGM 530R) in the collections of the Divisão de Geologia e Mineralogia, Ministerio das Minas e Energia, Rio de Janeiro. However, as Lucas points out (BZN **49**: 53, para. 7), *Diodontosaurus* would replace a universally accepted generic name with one that has not been used as valid since its proposal and which differs by only one letter from the accepted name.

The widespread use of *Dinodontosaurus*, as reviewed by Keyser & Cruickshank (1979), would make a pedantic reversion to *Diodontosaurus* a nightmare for workers in the field of Triassic Dicynodontia. My firm recommendation is to suppress the name *Diodontosaurus*. I therefore ask the Commission to accept the proposals by Lucas in BZN **49**: 53; the case fully meets the prima facie criteria of Article 79c of the Code.

(2) Laurie R. Walter

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I would like to comment on the proposed conservation of the generic name *Dinodontosaurus*. As Dr Lucas commented in his proposal, the name *Dinodontosaurus* is well known to workers on Triassic tetrapods, whereas the senior synonym is entirely unknown. I therefore urge the Commission to suppress the name *Diodontosaurus* Caldas, 1936 and to conserve the name *Dinodontosaurus* Romer, 1943.

(3) Alan J. Charig

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I support most strongly Lucas's proposal to conserve the dicynodont name *Dinodontosaurus* Romer, 1943. To switch to the totally unused name *Diodontosaurus* Caldas, 1936 would cause great confusion, compounded by the fortuitous difference of only one letter in the spelling of the two names. It would be inevitable that many workers (specialist as well as generalist) would continue to use the familiar name *Dinodontosaurus*. Such a switch, which has been recommended by nobody, would be a blatant departure from nomenclatural stability and it has no compensating advantages whatsoever.

Comments on the proposed designation of a neotype for *Coelophysis bauri* (Cope, 1887) (Reptilia, Saurischia)
(Case 2840; see BZN **49**: 276–279; **50**: 147–151, 236–239)

(1) David D. Gillette
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J. Lynett Gillette
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Edwin H. Colbert
Museum of Northern Arizona, Route 4, Box 720, Flagstaff, Arizona 86001, U.S.A.

In their proposal of the new binomen *Rioarribasaurus colberti*, Hunt & Lucas (1991) declared that *Coelophysis bauri* (Cope, 1887) is a nomen dubium on the grounds that none of the syntypes are diagnostic. In the same publication (which was entitled '*Rioarribasaurus*, a new name for a late Triassic dinosaur from New Mexico') they stated: 'We believe an effort to petition the International Commission on Zoological Nomenclature to conserve the name *Coelophysis bauri*, by designating a neotype, would be met with rejection ...'. This statement indicates that the new binomen was intended to replace *C. bauri*, rather than to denote a different taxon, as they have subsequently elaborated (BZN **50**: 147–150). The purpose of the application in Case 2840 is to establish a neotype for *C. bauri*.

Despite the claims of Hunt & Lucas (1991 and BZN **50**: 147–150), Lucas & Hunt (1992) and Sullivan (BZN **50**: 150–151), the type locality of the original *Coelophysis* material collected by David Baldwin somewhere in the vicinity of modern Ghost Ranch cannot be proven to be *not* the same locality that Colbert discovered in 1947. No records exist that precisely identify Baldwin's locality. The locality cited by him as 'Arroyo Seco' is the major extant drainage for all of the northern half of Ghost Ranch, including the subsidiary tributary of Arroyo Yeso which drains the Ghost Ranch dinosaur quarry. This drainage system has been eroding Triassic bedrock at Ghost Ranch since the Pleistocene. Although we do not know where in this drainage Baldwin collected, it is not unreasonable to assume that the skeletal material he collected from Arroyo Seco could have been from the present Ghost Ranch quarry. Differences in preservation between originally collected material and the present Ghost Ranch quarry specimens may be due to differential subaerial exposure. Baldwin's material was from surface or near-surface material, whereas specimens collected since Colbert's discovery in 1947 have been deeply buried and hitherto unexposed bones.

The assignment of stratigraphic position of the Ghost Ranch quarry to the Rock Point Formation of the Chinle Group as argued by Hunt & Lucas (1991, 1992 and BZN **50**: 147–150) follows their revisionary stratigraphic nomenclature (Hunt & Lucas, 1992), which has not been tested. Therefore, nomenclatural disputes related to differences in stratigraphic opinion are inappropriate in this case. According to Hunt & Lucas (BZN **50**: 148, para. 5) '... there is only one fossil locality in the Rock Point Formation, and this is the Ghost Ranch quarry' and 'the majority of fossiliferous strata in the area belong to the Petrified Forest Formation'. Whether there are fewer

or more fossils found from higher or lower in these Triassic strata may be only a reflection of ease in prospecting and has little if any bearing on arguments regarding the stratigraphic position of either the original (Baldwin) type locality of *Coelophysis* or the Ghost Ranch quarry. Contrary to their claim that it is 'very unlikely that Cope's specimens came from' the Ghost Ranch quarry locality and 'most probably derive from' a lower stratigraphic position, we argue that it is indeed quite possible that the original materials and the Ghost Ranch quarry fossils are from the same site or from nearby in the same horizon.

Hunt & Lucas (1991) correctly remarked on the fact that 'the name *Coelophysis* [is] well entrenched in the scientific literature ...' but now contradict that statement by saying (BZN **50**: 149, para. 7): 'This usage [the generic name *Coelophysis*] is only entrenched in a technical literature of specialists in dinosaur studies ...'. Moreover, their claim that it is '... irrelevant that the Ghost Ranch dinosaur (not named as *Coelophysis*) is part of the logo of the New Mexico Museum of Natural History ...' contradicts their earlier statement (Hunt & Lucas, 1991) that '... the name *Coelophysis* ... is the well publicized name of the official state fossil of the state of New Mexico'. The name is widely used in college level textbooks, and has been used repeatedly in television documentaries about dinosaurs. It is very extensively used in both technical and popular literature, including field guides and encyclopedias.

Hunt & Lucas (BZN **50**: 149, para. 6) say that the obturator foramen is present in one *C. bauri* specimen (AMNH 2724) figured by Huene (1915) but is absent in all the material from the Ghost Ranch quarry. However, some of the recently prepared Ghost Ranch fossils do indicate an obturator foramen (as mentioned by Sullivan in BZN **50**: 151, para. 2). The presence or absence of the obturator foramen may have been an ontogenetic character, indicating individual variation in this trait, similar to the variability in the structure of the mesotarsal joint and in co-ossification of bones in the hind foot described by Colbert (1989, pp. 108–110). The argument presented by Hunt & Lucas (BZN **50**: 149, para. 6) that the presence or absence of the obturator foramen is a generic level distinction in all dinosaurs is contradicted by the observation that this feature is variable in the single population represented by the dinosaurs in the Ghost Ranch quarry. Thus, the argument that the presence or absence of the obturator foramen can be used to distinguish between the material collected by Baldwin and the Ghost Ranch quarry dinosaurs is insupportable.

Hunt & Lucas claim (BZN **50**: 149, para. 8) that the establishment of a neotype for *Coelophysis bauri* would be a 'recipe for taxonomic anarchy'. In view of the wide use of the name *Coelophysis*, we think just the opposite: the neotype should be established as a move towards stability.

(2) Benjamin S. Creisler
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I support the application of E.H. Colbert and others to set aside all previous type fixations for *Coelophysis bauri* and to designate the skeleton AMNH 7224 as neotype. Such an action is consistent with the basic goal of the Code, i.e. to provide the maximum continuity and universality in the use of scientific names for animals.

In their reply to Colbert et al., Hunt & Lucas (BZN **50**: 147–150) object to the application on the grounds that *Coelophysis* 'is only used in a limited technical

literature'. However, the usage is precisely what has always been understood by nomenclatural stability ('a long-accepted name in its accustomed meaning' (Code, p. xiv)). The vast majority of names which have been conserved by the Commission are names with a long historical usage in 'a limited technical literature of specialists', be it entomology, ichthyology or vertebrate paleontology.

Hunt & Lucas express concern that accepting Colbert's petition will strike 'at the very heart of taxonomic stability'. But 'taxonomic stability' is *not* what the Code and Commission are intended to provide. As clearly explained in the Introduction to the Code (pp. xiii, xiv), nomenclatural rules are designed to provide the maximum stability in scientific names compatible with taxonomic freedom.

The conflict over the use of the name *Coelophysis* for the Ghost Ranch theropod must be judged as a nomenclatural rather than a taxonomic issue. Whether Cope's original type material is the same taxon as the Ghost Ranch theropod is the kind of taxonomic judgment from which the Commission refrains in principle. However, the Commission has been given plenary powers to act in the name of nomenclatural stability when a 'long-accepted name in its accustomed meaning' is affected by a taxonomic decision. The tool available to the Commission in the case of *Coelophysis* is the designation of a type specimen.

The 'accustomed meaning' of *Coelophysis* for the past 45 years has been the Ghost Ranch theropod, in both the technical and popular literature. Hunt & Lucas (1991, p. 195) recognized this usage but, through an apparent misunderstanding of the scope and nature of the Commission's plenary powers (Article 79a of the Code), decided that a petition to conserve the name by designating a neotype from the Ghost Ranch material would not be successful 'simply because [Cope's] type material is extant', although Recommendation 75E indicates that the Commission can set aside existing type material and designate a neotype to resolve a zoological problem. Hunt & Lucas declared *Coelophysis* a nomen dubium and proposed a new name for the Ghost Ranch theropod, citing the difficulties in diagnosing Cope's fragmentary type material. However, nothing in that material itself precludes the inclusion of the Ghost Ranch theropod in *Coelophysis* (Padian, 1986; Colbert, 1989), and the possible discrepancy between the geological horizon of Cope's Arroyo Seco site and the Ghost Ranch Quarry is currently disputed.

Hunt & Lucas assert that 'the proposed neotype is not demonstrably the same taxon as the lectotype of *C. bauri*'. In Article 61a the Code states that 'the name-bearing type provides the objective standard of reference by which the application of the name it bears is determined, no matter how the boundaries of the taxon may change'. Importantly, the Code itself sets no standards for determining the diagnosis of a taxon or subjective synonyms, nor does it favor one particular approach to taxonomy (morphological or cladistic). The boundaries imposed on a taxon, subjective synonymies, and the degree to which type material is considered diagnostic are taxonomic judgments which may differ based on both the training and the methodology of a particular zoologist. The different taxonomic judgments concerning *Coelophysis* made by Colbert and by Hunt & Lucas are not the decisive issue, but rather the historical usage of the name *Coelophysis*.

A complication peculiar to fossil animals is the often fragmentary nature of name-bearing type specimens. Requiring that the name-bearing type specimen itself must be rigorously diagnostic poses problems for many well established names. For

instance, the type material for *Iguanodon*, the first dinosaur named, consists of a few isolated teeth found in an unidentified spot in Tilgate Forest, England. Most authorities no longer consider ornithopod teeth alone to be diagnostic. In such cases, historical usage has based a taxon on later, more informative specimens. If a long-accepted name attached to such a taxon might be rendered invalid by the alleged doubtful status of the name-bearing type specimen, a more formal solution is possible, as suggested by Simpson (1945, p. 30), in which a specimen recognized as diagnostic is made a neotype. The alternative used by Hunt & Lucas — to reduce the name to a nomen dubium and to erect a new nominal genus for the later specimens — may be appropriate in cases in which the name associated with the type is obscure, but otherwise such a practice is likely to upset nomenclatural stability as it is both traditionally understood and defined by the provisions of the Code.

Coelophysis is a 'long-accepted name' with an 'accustomed meaning' (the Ghost Ranch theropod) and should be conserved as a valid name by designating a neotype as proposed by Colbert et al.

Additional reference

Simpson, G.G. 1945. The principles of classification and a classification of mammals. *Bulletin of the American Museum of Natural History*, no. 85. xvi, 350 pp. American Museum of Natural History, New York.

(3) Nicholas Hotton III
Department of Paleobiology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

I wish to support the argument of Colbert et al. on the grounds that the name *Coelophysis bauri* is thoroughly and unequivocally established in the technical and popular literature in the sense of the Ghost Ranch skeletons and that the proposed neotype comes from the same stratigraphic level as the material described by Cope.

(4) Support for the application has also been received from Dr Dale A. Russell (*Canadian Museum of Nature, P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4, Canada*).

Comment on the proposed conservation of the subspecific name of *Catharacta antarctica lonnbergi* Mathews, 1912 (currently *Catharacta skua lonnbergi*; Aves, Charadriiformes)
(Case 2816; see BZN **50**: 48–51)

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We agree with Voisin et al. that disturbance to the current nomenclature of the brown skua by the resurrection by Brooke (1978) of the name *Stercorarius antarcticus*

madagascariensis Bonaparte, 1856 should be avoided. One of us (Bourne) felt that corrective action on the name to be conserved might be needed but hesitated to initiate this before seeing Bonaparte's type specimen.

There is still doubt about the identity of the type of *S. a. madagascariensis*. The *Catharacta* breeding in the Southern Ocean become smaller from *lonnbergi* of the New Zealand area westward to the *antarctica* of the Falklands area (see also Murphy, 1936). A tarsus as long as 85 mm (para. 3 of the application), which Dr Voisin informs us was checked after dismounting, is only found in the first area, whilst a wing span near 370 mm is found only in the second (Furness, 1987). Thus, the bird presumably belongs to one of the intermediate populations, named *Catharacta skua hamiltoni* by Hagen (1952), occurring at some of the breeding islands such as Tristan, Gough, and possibly also St Paul and Amsterdam Islands (Segonzac, 1972); these were commoner when the type of *madagascariensis* was collected.

Hitherto the simplest solution might have been to consider the race of *S. a. madagascariensis* indeterminable, eliminating any need for Commission action. However, with the development of molecular genetic techniques it has become feasible to obtain taxonomic information from DNA in the skin and feather bases of museum specimens. Drs B. Cohen, R. Wilson and R. Furness have examined base sequences among all the skua taxa from which Bonaparte's type is likely to have come and it should be possible to identify the actual population.

The specific name of *hamiltoni* Hagen, 1952 was rejected by Richardson (1984) among others but some authors, including Furness (1987), are continuing to use it. Therefore we propose that if the application by Voisin et al. is approved this name, which is also junior to *madagascariensis*, should be included with *Catharacta antarctica lonnbergi* Mathews, 1912 on the Official List.

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to place on the Official List of Specific Names in Zoology the name *hamiltoni* Hagen, 1952, as published in the trinomen *Catharacta skua hamiltoni*.

Additional references

Hagen, Y. 1952. Birds of Tristan da Cunha. *Results of the Norwegian Expedition to Tristan da Cunha 1937-1938*, **20**: 1–248.

Murphy, R.C. 1936. Oceanic birds of South America. *American Museum of Natural History*, **2**: 1006–1034.

Richardson, M.E. 1984. Aspects of the ornithology of the Tristan da Cunha group and Gough Island, 1972-1974. *Cormorant*, **12**: 123–201.

Segonzac, M. 1972. Données recentes sur la faune des îles Saint-Paul et Nouvelle Amsterdam. *L'Oiseau*, **42** (Special number): 3–68.

Comments on the proposed designation of *Lagomeryx ruetimeyeri* Thenius, 1948 as the type species of *Lagomeryx* Roger, 1904 (Mammalia, Artiodactyla)

(Case 2882; see BZN **50**: 133–136)

(1) Léonard Ginsburg

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Je pense que le meilleur type de *Lagomeryx* serait un bois. La pièce figurée par Rütimeyer est évidemment la meilleure, donc l'espèce créé par Thenius, *Lagomeryx ruetimeyeri*, serait, ou sera, la meilleure espèce-type.

(2) A.M. Lister
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I support the application of Gentry & Heizmann to designate *Lagomeryx ruetimeyeri* Thenius, 1948 as the type species of *Lagomeryx* Roger, 1904. The name *Lagomeryx* is understood by all specialists of Miocene artiodactyls to refer to distinctive, non-deciduous cervoid antlers with very long, upright pedicles and a cluster of terminal prongs at the top. Antlers of this form from Reisensburg, Germany, were placed in his new genus *Lagomeryx* by Roger (1904). However, he included them under *Palaeomeryx meyeri* Hofmann, 1893, of which the type material comprises teeth and limb bones (less diagnostic than antlers), possibly referable to *Euprox* or *Heteroprox* which are genera of very different antler form from *Lagomeryx*. Thenius (1948) founded *L. ruetimeyeri* with a Reisensburg antler as holotype. Fixing this as the type species of *Lagomeryx* will crystallise the current, and indeed the originally intended, usage of both *Lagomeryx* and the other cervoid genera.

Comment on the proposed designation of *Antilope dichotoma* Gervais, 1849 as the type species of *Procervulus* Gaudry, 1877 (Mammalia, Artiodactyla)
(Case 2883; see BZN **50**: 137–139)

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I support the application by Gentry & Rössner to designate *Antilope dichotoma* Gervais, 1849 as the type species of *Procervulus*. The name *Procervulus* is understood by all specialists of Miocene artiodactyls to refer to distinctive, non-deciduous cervoid antlers with a distal bifurcation, as illustrated by Gaudry (1877) when founding the genus. However, Gaudry used the name *Cervus aurelianensis* Meyer, 1843, the type material of which cannot be equated with the *Procervulus* antlers. *A. dichotoma* was based on antlers which agree with those of *Procervulus*, and the designation of this species as the type will clearly resolve this case of mistaken identity, as already suggested by Stehlin (1925).

OPINION 1750

Clidastes Cope, 1868 (Reptilia, Sauria): *C. propython* Cope, 1869 designated as the type species

Ruling

(1) Under the plenary powers all previous fixations of type species for the nominal genus *Clidastes* Cope, 1868 are hereby set aside and *Clidastes propython* Cope, 1869 is designated as the type species.

(2) The name *Clidastes* Cope, 1868 (gender: masculine), type species by designation under the plenary powers in (1) above *Clidastes propython* Cope, 1869, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *propython* Cope, 1869, as published in the binomen *Clidastes propython* (specific name of the type species of *Clidastes* Cope, 1868), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2718

An application for the designation of *Clidastes propython* Cope, 1869 as the type species of *Clidastes* Cope, 1868 was received from Dr Caitlin R. Kiernan (*University of Alabama at Birmingham, Homewood, Alabama, U.S.A.*) on 16 March 1989. After correspondence the case was published in BZN **49**: 137–139 (June 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the 12 additional references held by the Commission Secretariat demonstrating usage of the name *Clidastes* (para. 5 of the application) were all published in the last 50 years and most appeared after 1975.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 138. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — 2: Bouchet and Lehtinen.

No votes were received from Starobogatov and Uéno.

Ride was on leave of absence.

Lehtinen would have preferred to adopt the junior synonym *Edestosaurus* Marsh, 1871 (cf. para. 5 of the application) even though the name was as yet obscure.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Clidastes Cope, 1868, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **20**: 181.

propython, *Clidastes*, Cope, 1869, *Proceedings of the Boston Society of Natural History*, **12**: 258.

OPINION 1751

Procellaria gigantea Gmelin, [1789] (currently *Macronectes giganteus*; Aves, Procellariiformes): usage of the specific name conserved by the designation of a neotype

Ruling

(1) Under the plenary powers specimen no. 1911 340 in the Catalogue Général of the Laboratoire de Zoologie: Mammifères et Oiseaux, Muséum National d'Histoire Naturelle, Paris, is hereby designated as the neotype for the nominal species *Procellaria gigantea* Gmelin, [1789].

(2) The name *Macronectes* Richmond, 1905 (gender: masculine), type species by monotypy of the replaced nominal genus *Ossifraga* Hombron & Jacquinot, 1844, *Procellaria gigantea* Gmelin, [1789], is hereby placed on the Official List of Generic Names in Zoology.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *gigantea* Gmelin, [1789], as published in the binomen *Procellaria gigantea* (specific name of the type species of *Macronectes* Richmond, 1905) and as defined by the neotype designated in (1) above;

(b) *halli* Mathews, 1912, as published in the trinomen *Macronectes giganteus halli* and as defined by the lectotype (specimen no. 91.6.16.6 in the collections at Tring of the Natural History Museum, London) designated by Bourne & Warham (1966).

History of Case 2784

An application for the conservation of usage of the specific name of *Procellaria gigantea* Gmelin, [1789] by the designation of a neotype was received from Dr J.-F. Voisin (*Muséum National d'Histoire Naturelle, Paris, France*) and 16 others on 6 August 1990. After correspondence the case was published in BZN **49**: 140–143 (June 1992). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the Secretariat had received a copy of a letter from Dr G.F. Mees (*Busselton, Western Australia*) to one of the authors (Prof W.J. Bock). Dr Mees supported the taxonomic aims of the proposals but he suggested that an application was not necessary because of comments by Mathews (1912) on the geographical ranges of *Macronectes giganteus* (Gmelin, [1789]) and *M. halli* Mathews, 1912. However, Bourne & Warham (1966) and the application had shown the need for typification of *giganteus* and *halli*. It was also noted that the 50 additional references held by the Commission Secretariat demonstrating usage of the names *giganteus* and *halli* (para. 5 of the application) were all published no earlier than 1970.

Decision of the Commission

On 1 March 1993 the members of the Commission were invited to vote on the proposals published in BZN **49**: 142. At the close of the voting period on 1 June 1993 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Štys, Thompson, Trjapitzin, Willink

Negative votes — none.

No votes were received from Kabata, Kraus, Starobogatov and Uéno.

Ride was on leave of absence.

Lehtinen commented that the worldwide authorship of the application had persuaded him in favour.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

gigantea, *Procellaria*, Gmelin, [1789], *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1, part 2 (Aves), p. 563.

halli, *Macronectes giganteus*, Mathews, 1912, *The birds of Australia*, vol. 2, part 2, p. 187.

Macronectes Richmond, 1905, *Proceedings of the Biological Society of Washington*, **18**: 76.

The following is the reference for the designation of the lectotype of *Macronectes giganteus halli* Mathews, 1912:

Bourne, W.R.P. & Warham, J. 1966. *Ardea*, **54**(1–2): 64.

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INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

General. Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat applications on this basis. Applicants are advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

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The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

CORRIGENDA

Vol. 49, part 1

page 95, line 7 — For '*Liparis* Scopoli, 1777 (gender: feminine)' read '*Liparis* Scopoli, 1777 (gender: masculine)'

Vol. 49, part 2

page 160, line 19 — For 'Bourguignat, 1883' read 'Godwin-Austen, 1882'. Delete 'correction of HELIXARIONIDAE'

page 160, line 26 — For 'an incorrect original spelling of HELICARIONIDAE' read 'an unjustified emendation of HELICARIONIDAE Godwin-Austen, 1882'

page 161, line 27 — For 'Bourguignat, 1883, *Annales des Sciences Naturelles (Zoologie)*, (6)**15**: art. 2, p. 9 (incorrectly spelled as HELIXARIONIDAE)' read 'Godwin-Austen, 1882, *Land and freshwater Mollusca of India* ..., vol. 1, part 2, p. 65'

page 161, line 32 — For 'an incorrect original spelling of HELICARIONIDAE' read 'an unjustified emendation of HELICARIONIDAE'

Vol. 49, part 4

page 297, line 11 — For 'HELICARIONIDAE Bourguignat, 1883' read 'HELICARIONIDAE Godwin-Austin, 1882'

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